

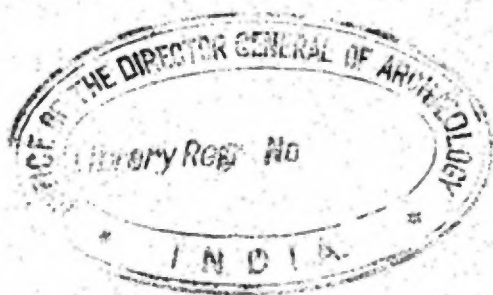
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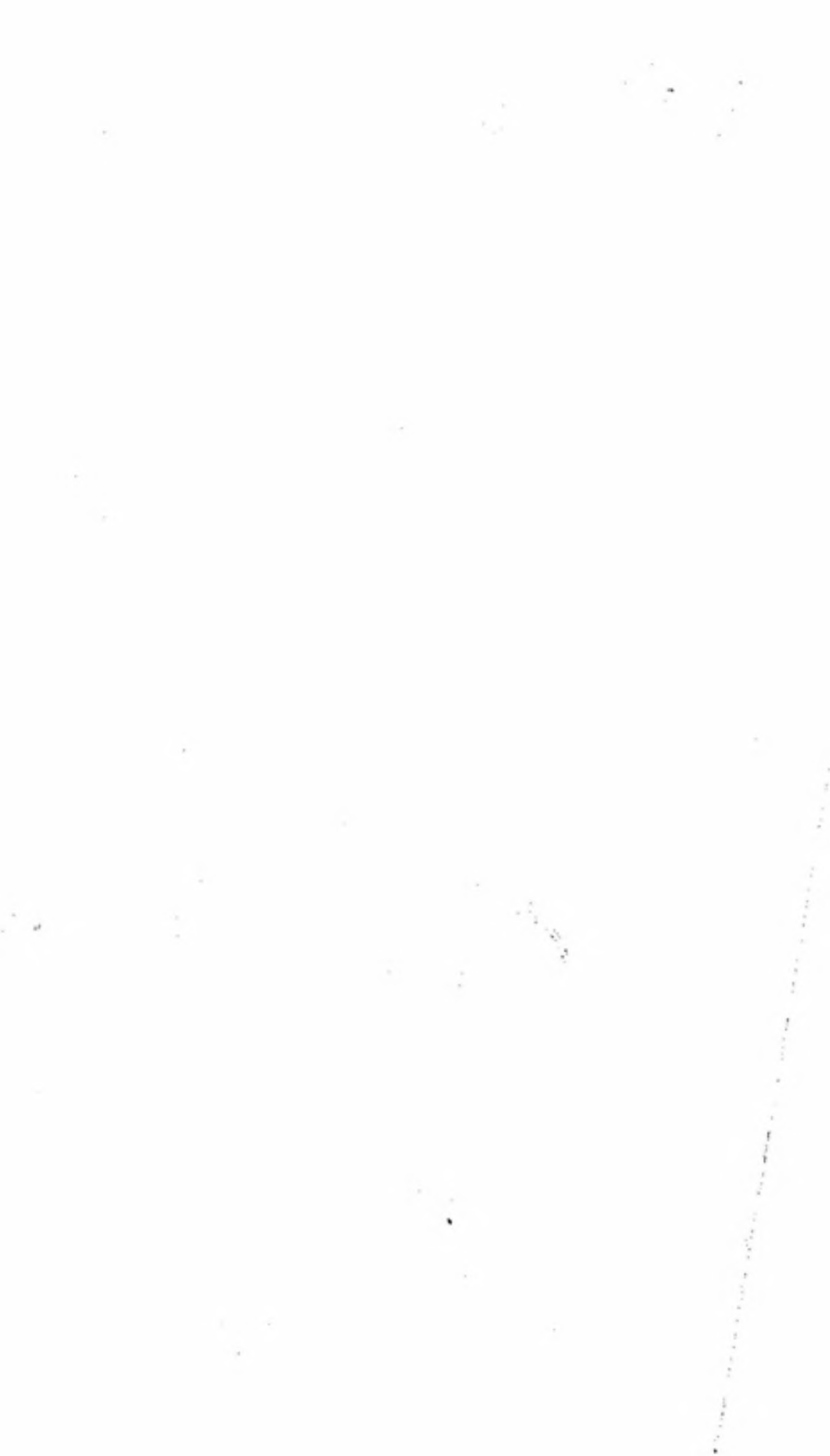
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THE
NUMISMATIC CHRONICLE,
AND
JOURNAL OF THE NUMISMATIC SOCIETY.





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 AND
JOURNAL
 OF THE
NUMISMATIC SOCIETY.

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NUMISMATIC CHRONICLE.

I.

DÉCRET DE CYZIQUE POUR UN ANTANDRIEN.



MONNAIE D'ARGENT D'ANTANDROS.

Δραχμαὶ . . . τῶν ἐπίσημα τρίγος.—Simonide, *Epigr.* 159.

DEUX membres du Syllogue littéraire de Constantinople, le Révérend C. G. Curtis et M. Σταυράκης Ἀριστάρχης, ont publié en 1885 dans les mémoires de cette société un article d'épigraphie constantinopolitaine (*Ἀνέκδοτοι ἐπιγραφαὶ Βυζαντίου*) où figure un décret ionien d'ancienne date, fort malheureusement mutilé, qui a été apporté à Constantinople des ruines de Cyzique et employé par les Byzantins dans la construction d'un aqueduc.¹ Comme ce document ne paraît point encore avoir été bien interprété et que c'est en comparant avec des monnaies le relief dont il est orné que j'en ai trouvé le sens, on me permettra d'en parler ici. Je reproduis la copie des

¹ Παράρτημα du tome xvi, p. 4. J'ai interrogé au sujet de cet aqueduc M. le professeur Strzygowski, l'érudit auteur des *Byzantinische Wasserbehälter von Konstantinopel*; il m'a répondu n'en rien savoir. M. Th. Wiegand, du musée de Berlin, dans un séjour à Constantinople, a bien voulu rechercher pour moi l'inscription qui nous occupe; mais ses recherches n'ont pas abouti.

premiers éditeurs, avec les indications dont ils l'ont accompagnée. Cette copie est mal faite, et a forte laide apparence; mais il faut bien la donner telle quelle.

Ἐν Χάσκιῳ, ἐντὸς τοῦ ὑδραγωγείου, ἐπὶ μαρμάρου ἔχοντος ἄνωθεν ἐν ἀναγλύφῳ αἶγα, βαίνουσιν πρὸς τὰ δεξιὰ τοῦ ὀρθῶντος.

//// NTΩΙΔΗΜΩΙΑΡΓΑΔΕΙΣΓΡΥΡΑΝΕ
 //// ΡΙΟΣΔΙΟΝΥΞΟΕΡΕΣΤΑΤΕΙΘΕΜΙΣΤ
 //// ΥΛΟΕΓΡΑΜΜΑΤΕΥΕΝΔΙΑΦΟ //// ΞΜ
 //// ΕΙΡΕΝΑΛ<ΝΙΝΓ //// ΙΤΑΝΑΡΙΟΝ

//////// ΑΙΦ
 ////////// Ο //////////



Γ ΝΚΑΙ
 ΙΝΚΥΞ
 ΕΜ
 ΝΚΑΙΕ
 ΥΕΙΑΝΓΛΙ
 ΛΓΗΤΑ

ΑΕΡΟ
 ΑΤΟΡΕΩΡΑΝΤΙΟ
 ΤΑΝΔΡΙΟΝ

Les éditeurs ne disent rien du carré rectangulaire ménagé au milieu de l'inscription; c'est sans doute un trou de mortaise ou une ouverture percée lors d'un ré-emploi de la stèle.

L'intitulé est pareil à celui des décrets attiques de même époque. Le dialecte et la mention de la tribu Ἀργαδεῖς attestent que l'inscription provient d'une ville ionienne, et sans doute de Cyzique, où cette tribu, l'une des quatre tribus ioniennes, paraît souvent dans les documents épigraphiques.² On restituera comme suit cet intitulé :

[Ἐδοξε]ν τῷ δήμῳ Ἀργαδεῖς [ἐπ]ρυ[τ]άνε[υεν]
 [Δημήτ]ριος Διονυσ(ι)ο ἐπεσάται· Θεμιστ[ιος]
 ὑλο ἐγραμμάτευεν· Δι..... s M...
 εἶπεν·

² Töpffer, art. *Argadeis* dans l'*Encyclopédie* de Pauly-Wissowa.

Le reste du décret est tellement endommagé, et la copie doit être si mauvaise que tout essai de restitution est impossible; et MM. Curtis et Aristarchis, en fabriquant de l'inscription une restitution intégrale, se sont moqués du lecteur. Il n'y aurait pas lieu de mentionner cette extravagante élucubration, si dans son excellent recueil d'inscriptions grecques, M. Charles Michel, tout en repoussant la restitution proposée par Curtis et Aristarchis pour les lignes dont il ne reste que quelques lettres, n'avait admis leur restitution de la ligne 4: [ὁ δαίνα] εἶπεν· ἀ[γάλματι τιμῆσαι Π]ᾶν' ἀ[γ]ριον.³ Pan n'a rien à voir avec ce décret, malgré la chèvre sculptée en tête de la stèle. Cette chèvre doit être un παράσημον, à ajouter à ceux que j'ai étudiés ailleurs.⁴ L'inscription est du IV^e siècle; c'est bien en effet au IV^e siècle qu'a fleuri cette jolie mode d'orner les décrets honorifiques avec le παράσημον, on pourrait dire les armoiries, de la ville du personnage honoré. Le décret qui nous occupe doit provenir, avons-nous dit, de Cyzique; or, justement, nous savons, par une belle stèle aujourd'hui à Tchimli-Kiosk,⁵ qu'à Cyzique, comme à Delphes, Olympie ou Epidaure, a existé, au IV^e siècle, la mode des stèles à armoiries.

Notre décret, à cause de son παράσημον, est donc un décret honorifique. Le nom du personnage honoré, sans

³ *Recueil d'inscriptions grecques*, no. 533. M. Svoboda (*Die griechischen Volksbeschlüsse*, p. 42, cf. p. 35) donne, lui aussi, les quatre premières lignes de notre inscription d'après la restitution publiée dans le Σύλλογος. Mais cela ne lui est pas reprochable: *Mir ist diese Zeitschrift (le Σύλλογος) hier unzugänglich*, nous dit-il; *ich verdanke die Mittheilung der Inschrift der Zuvorkommenheit meines Freundes H. G. Lolling in Athen.*

⁴ *Bull. de corr. hell.*, xx (1896), p. 549, sq.; xxi (1897), p. 577.

⁵ *Bull. de corr. hell.*, xiii (1889), Pl. IX.

le patronymique, se trouvait à la ligne 4, immédiatement après *εἶπεν*. Il était suivi d'un ethnique dont nous avons la fin mal copiée : **TANAPION**. Le même ethnique, mutilé de la même façon, reparait à la dernière ligne de la copie : **TANΔΡΙΟΝ**. La restitution [*Ἄν*]τάνδριον n'est pas douteuse, puisque les monnaies d'Antandros portent au revers *la chèvre marchant à droite*, c'est à dire la représentation même qui décore notre stèle eyzicénienne. La monnaie d'argent qu'on voit ici reproduite date, d'après M. Warwick Wroth, des environs de l'an 400 ;⁶ quoique antérieure d'environ un demi-siècle à notre décret, elle nous permet d'imaginer le relief dont il est surmonté.

À partir de la ligne 5, l'inscription devait énumérer les avantages accordés à l'Antandrien.

Il serait souhaitable que ce décret fût retrouvé et transporté au Musée Impérial Ottoman, pour qu'on pût faire photographier le relief, et voir s'il n'est pas possible de déchiffrer l'inscription mieux que Curtis et Aristarchis ne l'ont fait. La façon dont il est libellé le distingue des autres décrets honorifiques de Cyzique ;⁷ et peut-être qu'un déchiffrement nouveau donnerait quelques formes dialectales intéressantes, et forcerait les grammairiens d'accorder à cette inscription une attention qu'ils ont négligé jusqu'ici de lui donner : c'est un texte qui manque au recueil d'Hoffmann.⁸

PAUL F. PERDRIZET.

⁶ *Cat. gr. coins, Troas*, p. xxxvi et 83, No. 2, Pl. VII 2. Cf. Mionnet, II, p. 517 ; *Rev. Num.*, 1897, p. 305. Pour l'histoire d'Antandros, cf. Hirschfeld, art. *Antandros*, dans *l'Encycl. de Pauly-Wissowa*.

⁷ Pour ces décrets, cf. Michel, 532-538, en ajoutant *B.C.H.*, xiii (1889), p. 1 (cf. xx, p. 549, note 1).

⁸ Otto Hoffmann, *Die griechischen Dialekte*, iii, *Der ionische Dialekt* (Göttingen, 1898).

II.

THE SEATED FIGURE ON SILVER COINS OF RHEGIUM.

IN the last number of this journal¹ M. Six proposes a new interpretation of the Rhegian coin-type commonly known as "the Demos." In mentioning my former paper on the same type² he approves of the reasons that induced me to reject the demos-theory for the Rhegian coins and the contemporary pieces of Tarentum, which latter expressly designate the seated figure as Taras, the eponymous *œkist*.

M. Six suggests I should have concluded that if the latter is the *œkist*, the former should be the same. The thought is, indeed, not at all a remote one, and it (along with other theories) did present itself to me at one time. I relinquished it, however, for two reasons. First, in adopting Dr. Head's theory of an integral type, I found myself, on this supposition, unable to work in the accessories as attributes to the figure. Secondly, I soon perceived that, although both types appear to start on parallel lines, they by no means run on together afterwards.

Numismatists, in trying to establish a connexion between the two, have fixed on a few examples of the

¹ Vol. xviii, p. 281—285.

² *Num. Chron.*, xvii, p. 173—189.

Tarentine type, notably the one with the wreath. Now, I am far from denying that the earlier of the two (whichever that was) may have influenced the general design of the later; but it seems very doubtful to me if both types originally treated of the same subject for their respective cities, when I find them parting company later on.

For the men of Tarentum their *ækist* remains a founder and organizer. Accordingly he is portrayed in varied aspects. A *heros* he has indeed become, as when he holds the cup, or appears seated before the altar with the *kantharos* in his hand. Yet he seems to retain the character of the active agent as creator of the community's industrial pursuits and social occupations. Accordingly there is a great variety of designs in these figures of Taras in regard to attitudes, actions, and attributes, and one might almost say that there is nothing really fixed about the type beyond the seated posture. Can we, for example, establish any likeness, beyond this posture, between the architype of No. 7, Pl. I., of Mr. Evans's "Horsemen of Tarentum," and the Taras seated, strigil in hand, on some low structure of masonry, the walled enclosure of the *palaestra*, perhaps, keenly watching the contest?³

The figures on the coins of Rhegium retain, on the contrary, the same general aspect from first to last.

But these remarks are, in a sense, a digression from the main purpose of this enquiry, which is not a defence of my own position.

I will now, step by step and as far as the scope of this enquiry (which does not extend to certain types of the later bronze coinage) demands, follow M. Six's argument.

³ See *Journal International d'Archéologie Internationale Numismatique*, 1898, Pl. VII, 1.

M. Six identifies the figure as Iocastus, "πληγέντα ὑπὸ δράκοντος," and he discovers the reptile on several coins—thus: "Or si on examine avec soin les monnaies, etc., on aperçoit sur le No. 17 un *serpent* qui a grimpé autour du pied postérieur du siège et va mordre Jocaste au flanc gauche; la tête du reptile se voit au-dessus de la main gauche du roi. Le même serpent est visible, mais indistinctement, sur les Nos. 1, 6 et 16."

Into the question whether a monster serpent, a δράκων, is likely to be represented by the extremely thin curve which the writer takes for a serpent, I do not pretend to enter. The Hydra and the Python are differently depicted on ancient coins, and the lesser snake of Asklepios is likewise an unmistakable object. However, the term appears to have been occasionally applied to the ordinary serpent.

I would rather come to the point and try to make sure *if there is a serpent*.

Now, as regards coins Nos. 1, 6, and 16, I am, after careful examination of the originals (No. 1 is in my collection, No. 6 in the British Museum, and No. 16, reproduced from a coin in the French collection, is represented in the British Museum by a specimen from the same die), in a position to state that there is no serpent on these.

Before proceeding to a close examination of No. 17, the test-piece, I would observe that this coin is, in point of design and workmanship, the weakest of the three representatives of the later type (Nos. 15, 16, and 17). The grace and strength which characterize the figure on coin No. 15 have given place to coarseness and heaviness of touch, betraying but too clearly the work of an inferior engraver. The drapery is badly done, and

the hand—always a sure test of an artist's ability—is misshapen, the fingers resembling claws.

M. Six discovers the serpent's head just above one of these unsightly hands. But having procured a fresh cast of the coin from Paris, I do not hesitate to state that the supposed head is the extreme point in the top edge of the garment which the engraver has awkwardly finished off in a tiny thickening, just before it disappears behind the figure's back. The short bend that appears close to the rounded top of the chair leg is not a snake's body, but originated in the engraver's trying to indicate (awkwardly again) part of the corresponding top on the off-leg, behind; he starts the curve from the near leg, the wrong one. The body of the supposed reptile ends at this point; but its tail seems to reappear in the shape of a faint line near the lower end of the chair-leg. My cast proves that this is simply a slight irregularity, mainly in the ground line.

The writer continues: "Sur les Nos. 11 et 14 et sur un tétradrachme de ma collection, on dirait que le serpent s'est enroulé autour des branches et dresse la tête au-dessus du genou de Jocaste."

The bodies of these supposed serpents are drapery folds; the head is a lumpy flaw.

Again: "Et si ce héros—car les tétradrachmes Nos. 4 et 5 le figurent divinisé—retourne la tête sur le No. 9, c'est qu'il est effrayé par la vue d'un serpent qui s'enroule autour du bâton qu'il tient à la main."

No serpent encircles the staff.

Farther: "Sur d'autres pièces, où le serpent ne paraît pas, le graveur donne à Jocaste une pose qui indique assez qu'il est souffrant et atteint d'un mal incurable; il porte la main à la plaie, et s'appuie, penché en avant, sur son

bâton, avec une expression de vive douleur et de profonde tristesse. La drachme No. 8 est la mieux réussie."

As to the supposed expression of strong pain and deep sadness in the faces of these figures, I can detect neither emotion. In the features of Nos. 6, 7, 10, 11, 12, 13, and 14, I see, if anything, an expression of power and determination, such as would befit a *heros* or a god. Nos. 16 and 17 are so weak in design that I hesitate to give any opinion. No. 9 expresses some vivid emotion—I think displeasure. No. 8 I had, tentatively, interpreted as an attitude of slumber or rest. The other figures seem too primitive for me to venture on any suggestion in this direction.

Concerning the position of the hand, in one case (No. 17) it is shown open, with the claw-like fingers protruding. In three cases (Nos. 4, 5, and 9) the hand carries the staff. In seven more the figure places it on the seat in a natural gesture of support. On the seven remaining coins the hand, or fist, is placed on the hip, or a little higher up against the side of the body. The gesture may, or may not, express firmness of bearing and self-assertion. Most probably this last as well as the former attitude express nothing in particular, the engraver merely disposing of the unoccupied hand in the manner that happened to occur to him at the moment.

The writer goes on to identify our figure with that of a seated divinity on certain bronze coins. With these latter I am not concerned. But I specially note that he brings the adjunct, a snake, in the exergue of one of them, into intimate relation with the main type.

M. Six shares my opinion that the wreath which always encircles the figure is an olive crown, not laurel.

He continues: "Les symboles, etc., n'ont aucun rapport

avec Jocaste; ce sont les marques personnelles d'officiers monétaires ou de magistrats annuels et servent à distinguer les émissions successives."

If, to take the last point first, these adjuncts served to *distinguish* successive issues, they must not repeat themselves on different ones. But the bunch of grapes appears on one of the latest (No. 17), and on an earlier coin with the legend *RECINOS*, which was acquired not long ago by the British Museum.⁴

Secondly, as to the adjuncts being the signets of mint masters or of city magistrates, this assumption involves, to my thinking, the necessity of a fixed type for each, such as we meet with on numerous, and generally later, coins, and where we can occasionally prove that they bear the character of signets, or crests, which M. Six claims for them here. Such a fixity of type cannot, however, be shown to exist, for one of the adjuncts, the dog, is displayed quite differently on Nos. 11 and 12.

Lastly, it seems to me that the probability, if not absolute certainty, of a connexion between the figure and at any rate one of the attributes *can* be shown to exist.

Of course, the subject of adjuncts is tangled and difficult in most cases, and I doubt if much that is certain, or nearly so, can ever be gathered from this field of enquiry. Still, in some cases we have fairly reliable tests, and I think it will be admitted that one of the safest of these is the presence of *action* between adjunct and main type, by which action the coin "device" is changed into what is commonly understood by a *picture*. This element of action

⁴ See Pl. II, 31, *Catalogue of Greek Coins, etc.*, January 20, 1898. London: Messrs. Sotheby, Wilkinson, and Hodge.

we meet with on coin No. 12, where the dog looks up so expressively to its master. If it be granted, then, that the dog is in this case an attribute of the figure, we must reasonably concede the same relation to it on No. 11. Indeed, we must be content now to judge of the whole matter on the basis of greater and lesser probabilities. If we concede that the dog is likely to be an attribute of the figure, our concession involves a further one, viz., that its position close beside the figure points in the same direction. As the other adjuncts occupy the same position, they are likely to stand in the same relation.

One adjunct only occupies a position different from the rest—the bunch of grapes—because it seems to be linked with the olive into a votive crown around the image of Aristaeus, the guardian of their culture.⁵

One more word on this question of mint marks *versus* attributes. I noticed before, that the writer claims for a snake the position of an attribute to the main type, a seated figure, when it occurs in the exergue of a late coin in bronze. On coin No. 16 of our plate a snake appears in yet closer proximity to a similar figure. Nevertheless he denies to the latter what he claims for the former.

The rest of M. Six's paper calls for no remark on my part.

E. J. SELTMAN.

⁵ Diodor., IV, 81. Ἀρισταῖον δὲ παρὰ τῶν νυμφῶν μαθόντα — τῶν ἐλαιῶν τὴν κατεργασίαν διδάξαι πρῶτον τοὺς ἀνθρώπους. Diodor., IV, 82. Παρὰ τοῖς τὴν Σικελίαν οἰκοῦσι διαφερόντως φασὶ τιμῆσθαι τὸν Ἀρισταῖον ὡς θεόν, καὶ μάλιστα ὑπὸ τῶν συγκομιζόντων τὸν τῆς ἐλαίας καρπόν.

In Verrem IV, 57, 128. Aristaens, qui inventor olei esse dicitur, una cum Libero patre apud Syracusanos eodem erat in templo consecratus. This implies his veneration as the guardian of the culture of the vine too. Compare also coin-types of Carthaea (grapes and star).

III.

SWISS BRACTEATES IN THE BRITISH MUSEUM.

(See Plates I., II.)

THE Swiss Bracteates in the British Museum, though not very numerous (in round numbers there are about 350 specimens), form on the whole a representative collection of this interesting class of coins. In view of the fact that they are somewhat neglected by the majority of English numismatists, a short account of their origin and history may not be out of place. They owe their existence, in common with all other bracteates, to the craze for enlarging the silver denarius, which seized the German Empire and its dependencies in the second half of the eleventh century, with, for a time, such deplorable results for the artistic value of the coinage. Into the origin of this craze it would be beyond the scope of this paper to enter, and it must suffice to say that cheapness of production seems to have been one of the chief reasons for it. But when the enlarged denarius becomes an accomplished fact, the coins themselves explain all further developments. Being representatives of the old denarius, their weight is not altered, and consequently they are extremely thin, with the result that the types of obverse and reverse have a tendency to obliterate each other, and it

not unfrequently happens that it is hard to decide to which face of a coin any one detail belongs. This was naturally no less inconvenient to those who used the coins in the eleventh century than to us who study them in the nineteenth, and a change of some sort became inevitable. In some places the old denarius reappeared, but in the majority of cases the remedy adopted was to strike the coin on one side only, thus obtaining one clear impression, instead of two indistinct ones, and this is the origin of the bracteate. The date of this transition may be placed at about 1125, and for nearly two centuries from this time bracteates take the place of the denarius.

It is obvious that coins of such a fabric offer great facilities for elaborate designs and high relief, and very shortly after their introduction they show a tendency to increase in size, in order to find room for the types and inscriptions, for which only one side was now available. This further increase in size was not accompanied by any increase in weight, and the coins become thinner than ever, till it is almost impossible to touch them without bending their paper-like edges. The high-water mark of style was reached between 1150 and 1220, that is to say, from the accession of Frederic Barbarossa to the death of Otto IV, and coins of this date are often of extreme beauty and interest, and are most valuable examples of the rich and highly-finished style of the end of the twelfth century. After this time, however, they degenerate as rapidly as they developed, inscriptions become rare or illegible, workmanship coarse and careless, and size and fineness of metal decrease, till by the end of the thirteenth and in the fourteenth century they afford a melancholy instance of the truth of the saying, "*Corruptio optimi pessima*." Nothing could well be less like

what a coin should be than the wretched little pieces of greyish metal, which it would be gross flattery to call silver, adorned with a few misshapen swellings in lieu of type, which the seigncurial and monastic mints issued by thousands in the fourteenth century. But the bracteate, as a monetary unit, ceases to exist with the appearance of the gros, first coined in Prague by Wenceslas II, of Bohemia, about 1300, and though one-sided coins continued to be struck till well into the eighteenth century, these are in no sense bracteates, but are the "hohlpennige" and "cleyne penningen," the small change of the later middle ages.

Switzerland, with which, for numismatic purposes, it is convenient to include the southern part of Baden and the neighbourhood of Constance, presents several peculiarities in its coinage of bracteates. Specimens of the enlarged denarius, or, as it is more convenient to call it, the half-bracteate, occur at Basle, Constance, and Zurich. As to the date of these there is some difficulty, for it seems necessary to place some of the Basle series in the first half of the eleventh century, a very early date, to which German half-bracteates afford no parallel. They have two characteristics by which they may easily be distinguished from all other half-bracteates, namely, the quadrangular shape of the flan, in the great majority of specimens, and the fact that in nearly every instance the legend, when it runs round the edge of the field in the ordinary way, and frequently part of the type, have been obliterated by a series of parallel depressions forming a rough square round the type, such as might be made by a blunt-edged chisel. The reason for this is very difficult to see, unless it was done with a view of spreading and enlarging the diameter of the coins.

Half-bracteates seem to have continued in use till late in the twelfth century, both at Basle and Zurich, that is to say, considerably longer than they did in Germany proper. At any rate, the coins which succeed them cannot be assigned to an earlier date than the closing years of that century. These, the true Swiss bracteates, are also widely different from contemporary German coins. They are small, rarely exceeding $\frac{1}{6}$ inch in diameter, and very simple in design; but their most noticeable feature is, as in the case of the half-bracteates, the shape of the flan. It is sometimes a simple rectangle, but the typical form is a rectangle with convex sides, which, in extreme cases, becomes a circle with four points on the circumference. Inscriptions are always short, the most usual merely consisting of the two first letters of the name of the place of mintage, and frequently the coins are uninscribed. These quadrangular coins were superseded by round bracteates at the end of the fourteenth century. Another class of bracteate, of the Swabian type, occurs chiefly in the neighbourhood of Constance. The flan is circular, and larger than the Swiss type, and the designs more elaborate. I shall describe them at greater length under Constance. To these two types, with very few exceptions, the coinage of Switzerland, from the twelfth to the fifteenth century, belongs. With regard to the style of these coins, it is noticeable that as they did not rise to the height of excellence reached by the North German bracteates, so they did not fall to the same depths of barbarism. The latter point may be explained by the rise of the power of the towns, and partly, no doubt, by the absence of the crowds of small seigneurs possessing rights of coinage, who are responsible for so much of the degradation of the German

money. In Basle, Schaffhausen, St. Gall, and Zurich there was a constant struggle between town and abbey or bishopric for the control of the coinage, a right which in each case was originally granted to the Church, and which in each case eventually fell to the town—at Basle in 1373, at Schaffhausen in 1370, at Zurich, not till 1524; and the mutual jealousies, or commercial treaties, between one town and another, made it a matter of importance to keep the standard of coinage at a respectable level.

Bracteates were coined in Switzerland till a late date, well into the second half of the fifteenth century; and the issue of hohlpfennige continued, as elsewhere, till the eighteenth.

To turn to the British Museum collection—the coins to which I shall refer are partly in the General and partly in the Townshend Cabinets.

BASLE. EPISCOPAL MINT.

HALF-BRACTEATES.

1. Five specimens of the type assigned to Bishop Theodoric, 1041—1057, which were found in considerable numbers in the hoard of St. Paul-without-the-Walls at Rome, in 1849.

1. *Obv.*—THEODRIC, written in the form of a cross, between four saltires.

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. *Rev.*—BASILEA in three vertical lines—

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EAL
2

Two of these coins are struck on the obverse only.

2. Two specimens of the following:—

1.1. *Obv.*—BASILEA round a pearled inner circle, in which is the letter R.

. *Rev.*—Blank.

Assigned to Bishop Rudolf 1107—1122.

3. 1.1. *Obv.*—Cross formed by four pearled circles in an outer pearled circle, in each of the smaller circles a letter, not clear enough to be legible.

Rev.—Blank, with incuse of obverse type.

By fabric this coin appears to belong here. A more definite attribution is impossible.

BRACTEATES.

Late 12th and early 13th Centuries. Flat fabric; type in plain circle.

1. '6. Half-length figure mitred facing, in r. pastoral staff, in l. book; maniple apparently on wrist; circular. [Pl. I. 1.]
2. '6. Bust mitred facing, in r. pastoral staff, in l. book; quadrangular. [Pl. I. 2.]

13th and 14th Centuries. Quadrangular; type in plain raised circle.

3. '6. Mitred head facing, between two chalices. [Pl. I. 3.]
4. '6. Mitred head to r., pastoral staff to r. of head.
5. '6. Mitred head facing, in sixfoil.
6. '6. Mitred head to l., between two crosses. [Pl. I. 4.]
7. '6. " " " Baselstäbe.
8. '6. " " " letters B A for Basilea.

There is a variety with an annulet above, between the points of the mitre [Pl. I. 5], and another with a pellet in place of the annulet.

9. '6. Mitred head to l. between P & ; annulet above mitre. This belongs either to Bishop Peter von Rychenstein, 1286—1297, or to Peter von Asphalt, 1297—1307.

The preceding type, with B A and an annulet above mitre, may belong to one of these bishops.

10. '6. Mitred head to l. between I O ; pellet above mitre. There are three Bishops Johann between 1385 and 1373, and this type may be assigned to them.

The B A type, with pellet above mitre, may belong here.

11. ·6. Mitred bust under an arch surmounted by a gable and cross, and flanked by two towers with conical roofs. On either side of the gable cross \mathcal{Z} N; the whole in a pearled circle. [Pl. I. 6.]

Assigned, on account of the inscription, to Bishop Berchtold II., builder of the church of St. Nicholas.

12. ·6. Basilisk to l. [Pl. I. 7]; a canting device.
13. ·6. Tower with conical roof between two pastoral staves. Circular flan. Early 13th century fabric. Not a certain attribution.

Some of the above, especially Nos. 8 and 12, may belong to the town rather than the bishop, as the town certainly had some share in the management of the mint before it acquired the sole right by purchase from Bishop Johann von Wien, in 1373.

The following are undoubtedly municipal, and date from 1373 onwards:—

1373—1400. Quadrangular; type in plain raised circle.

14. ·7. Baselstab between B A. [Pl. I. 8.]
15. ·7. Baselstab on shield, a pellet above and to r. and l. of shield.

From 1400 onwards. Circular.

16. ·7. Baselstab on shield in plain raised circle; border of small pellets.
17. ·6. Similar; border of larger pellets. [Pl. I. 9.]
18. ·6. Similar; strap-work to shield.

None of these are earlier than the fourteenth century, the latest of the class are of the fifteenth. They are, of course, not bracteates in the true sense of the word.

BERNE.

The right of coinage was granted to the City of Berne in 1218 by the Emperor Frederic II.

13th Century. Quadrangular; type in pearled circle.

1. ·6. Bear to l.; above, crowned head facing. [Pl. I. 10.]

14th Century. Quadrangular; type in plain raised circle.

2. ·6. Bear to l.; above, bare head to l.

15th Century and later. Circular; type in plain raised circle.

8. ·5. Bear to l.; above, the imperial eagle displayed.

This is the type of all the later one-sided coins. The head on the earlier issues is probably that of the Emperor. When shown without a crown, it may be St. Vincent.

BURGDORF.

A mint of the Counts of Kyburg between 1218 and 1406.

13th and 14th Centuries. Quadrangular; type in plain-raised circle.

1. ·5. +BVRDORF. Bare head facing.

The head appears to be that of a saint.

2. ·6. Head to l. in broad-brimmed conical hat, between B V.

Probably one of the Counts of Kyburg.

15th Century. Late style, circular, the field concave, and the edge dished.

8. ·6. A gable flanked by two embattled towers.

4. ·6. An embattled tower, over a gateway flanked by turrets.

CHUR. EPISCOPAL MINT.

The type is an ibex; on the earlier coins shown walking or standing, in later coins springing to the left.

No specimen of the earliest type is in the Museum collection.

18th Century.

- 7. Ibex to l. looking r., the horns shown straight instead of curved; below, φ , in plain raised circle with pearled border; quadrangular. [Pl. I. 17.]

16th and 17th Centuries. Circular.

- 5. to ·4. Ibex springing to l. in pearled or plain circle.

Several varieties of this type.

There is included in this series the following coin:—

- 6. Head of ibex to l., in plain sunk circle, on a thick four-sided flan; not of Swiss style.

It is out of place here, and is considered Styrian by Schlumberger.¹

CONSTANCE. EPISCOPAL MINT.

A small number of half-bracteates are known. Of these the Museum possesses no specimen.

Bracteates exist of both Swiss and Swabian fabric—the latter form the great majority of the coinage. The earliest date from the end of the twelfth century.

¹ G. L. Schlumberger, *Des Bractéates d'Allemagne*, Paris, 1878, p. 861, s.v.

Swabian fabric. Circular; type in plain raised circle, with border of pellets.

Early 13th Century.

1. ·9. Bust facing, with two-pointed mitre, pastoral staff in r., book in l., under a trefoiled canopy. [Pl. I. 18.]
2. ·8. Bust facing, with two-pointed mitre, pastoral staff in r., lis in l. [Pl. I. 14.]
3. ·8. Similar, with a pastoral staff in each hand.

These three types, with the early form of mitre, must be placed in the first quarter of the century; the later form of mitre, with one point, supersedes the old form about 1220.

Later 13th and 14th Centuries.

4. ·8. Mitred bust of later type facing, between moon and sun. [Pl. I. 15.]
5. ·7. Similar, between pastoral staff and lis.
6. ·7. Two pastoral staves in saltire, round them CONSTANT (Constantia) backwards. [Pl. I. 16.]
7. ·7. Two pastoral staves in saltire; above them, sun; below, moon.

15th Century. Concave field, plain dished edge.

8. ·7. Mitred head facing, between moon and sun.

Swiss fabric. Quadrangular; type in plain or pearled circle.

Late 12th and early 13th Centuries. Flat fabric.

9. ·5. Bust to l., with two-pointed mitre, between two suns or stars in pearled circle. [Pl. I. 11.]
10. ·5. Cross between two pastoral staves, in plain circle. [Pl. I. 12.]

No later specimens of this fabric occur.

The bracteates of Constance were extensively imitated, and it is often impossible to be certain whether a coin belongs to this mint or not. It seems reasonable to consider that all types bearing the sun and moon belong here.

DIESSENHOFEN. TOWN MINT.

Late 13th Century. Quadrangular; type in plain raised circle.

- 6. +JIONJSIVS. Diademed bust of St. Dionysius facing; a cross on bust. [Pl. I. 18.]

EINSIEDELN. ABBEY MINT.

13th Century. Quadrangular; type in plain raised circle.

- 6. Bird to l. standing; above, a cross. [Pl. I. 19.]

Four specimens of this coin are in the Museum. It is assigned to the Abbey of Einsiedeln on account of its type, the raven being connected with the legend of St. Meinrad, to whom the abbey was dedicated.

ENGELBERG. ABBEY MINT.

Four specimens, of early style, of the beginning of the 13th century; quadrangular; type in pearled circle.

- 7. Angel half length facing, wings displayed, over a mitred head to l. [Pl. I. 20.]

FREIBURG IM BREISGAU.

Two coins of late style, belonging to the series attributed to the Counts of Freiburg. Swabian fabric.

- 7 Eagle displayed on shield in plain circle, with border of pellets.

TOWN MINT; UNDER AUSTRIA.

Quadrangular; type in plain raised circle.

14th Century.

- 7. Helm with crest between F R. [Pl. I. 21.]

LAUFENBURG.

Struck by the Counts of Hapsburg-Laufenburg. Swiss fabric. Quadrangular; type in plain raised circle.

1. ·6. Helm with coronet, from which rises a swan's head and neck, an annulet in the beak; between letters L_O^V .
2. ·6. Similar, but no coronet to helm. A pellet below annulet in swan's beak, and a second annulet and pellet in the field to r. No inser. [Pl. I. 22.]

There are no specimens here of the common type with the forepart of a lion to l. between L_O^V .

LUCERNE. TOWN MINT.

No bracteates were struck here during the thirteenth and fourteenth centuries.

The following one-sided piece was first coined in 1418:—

- 6. Mitred bust facing between L V, in plain raised circle; circular. [Pl. I. 23.]

Later issues of this type are uninscribed, and of very bad style. They were succeeded by the following type in the sixteenth century:—

- 6. Arms of Lucerne in shaped shield, in plain circle, with border of large pellets. Several varieties of this type occur.

NEUCHÂTEL.

An Austrian mint in the fourteenth century. Swiss fabric; quadrangular. Austrian type in plain raised circle.

5. Helm with feather crest facing, between R Q for NOVUM CASTRUM.

RHEINAU. ABBEY MINT.

Bracteates of both Swiss and Swabian fabric were struck here. Two specimens of Swiss fabric are in the Museum; quadrangular. Type in plain raised circle.

6. Fish embowed to l.; below, star. [Pl. I. 24.]

There is no example of the Swabian coins in the collection. Their type is: two fishes naiaint to r. and l. respectively, with legend in a circle, MONETA ABBATIS AUGIENSIS. They are very similar to the Swabian coins of St. Gall.

ST. GALL. ABBEY MINT.

Coins of both Swiss and Swabian fabric. The Museum examples are as follows:—

Late 12th Century. Quadrangular; type in pearled circle.
Swiss fabric.

1. 7. Lamb walking to r.; above, sun. [Pl. I. 25.]
2. 7. A variety, with a cross instead of sun.

13th and 14th Centuries. A. Quadrangular; type in pearled circle. Swiss fabric.

3. 7. Agnus Dei to l., with halo and banner. [Pl. I. 26.]
- B. Circular; type in plain raised circle, with border of pellets. Swabian fabric.



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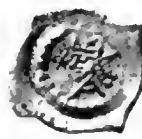
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AUT. G. V. P. C.



15th Century. Circular; concave field and dished edge, with border of pellets.

4. 6. Type as preceding. [Pl. I. 27.]

There are five specimens of the larger Swabian type, which occurs also at Constance and Rheinau.

5. 9. Head of St. Gall facing, tonsured and bareheaded. Circular legend, † MONETA SANCTI GALLI, in a border of pellets. [Pl. I. 28.]

These coins are of thirteenth-century style, and very similar to the episcopal and abbey coinages of Constance and Rheinau, and it is difficult to see on what grounds they have been assigned to the town mint of St. Gall and to the fourteenth century. Everything tends to show that they belong to the abbey.

SCHAFFHAUSEN.

Abbey mint till 1370, when the town obtained the sole right of coinage. Bracteates of Swiss type.

Early 13th Century. Quadrangular; type in circle of pellets; flat fabric.

1. 7. Ram standing to l.; fore-leg raised. [Pl. II. 1.]

Later 13th Century. Quadrangular; type in pearled circle.

2. 6. Demi-ram to l., issuing from tower with conical roof. [Pl. II. 2.]

14th Century. Quadrangular; type in plain raised circle.

3. 6. Demi-ram to l., issuing from tower with conical roof; careless work.

1415 and later. Circular; concave field, bevelled edge.

4. 6. Demi-ram running to l., issuing from embattled tower.
5. 6. Demi-ram running to l.; four pellets on outer border.
[Pl. II. 3.]

These four pellets make it probable that this coin is of the issue of 1424.¹ In a convention of that date between St. Gall, Schaffhausen, and Zurich, it was provided that the three mints should issue coins of equal weight and fineness, and to distinguish the coins from former issues, should place four pellets on the outer border of every coin. Under Zurich I shall describe another specimen of this issue.

SCHWYZ. CANTON.

One-sided coins of sixteenth century; circular type in plain raised circle in border of pellets.

5. Shaped shield of Schwyz. A variety has a double border to the shield.

SOLOTHURN. TOWN MINT.

Bracteates of Swiss fabric.

13th Century. Quadrangular; type in plain or pearly circle.

1. 7. Bare head of S. Ursus to l.; round it, VRSVS.
[Pl. II. 4.]

¹ To the same year belongs a very interesting plappart of St. Gall, in the Townshend Collection. It is dated in Arabic numerals, and therefore precedes by more than forty years the first German and Italian coins on which these numerals are used. It is as follows:—

R. 85. *Obv.*—SANTTVS 67LLVS 1222. St. Gall and the bear.

Rev.—+MOZETA: KOVA: SANT: 6ALIL

On a cross fleny in a quatrifoil a scutcheon bearing an eagle displayed.

13th and 14th Centuries. Quadrangular; type in plain raised circle.

2. 7. Head of St. Ursus facing, wearing peaked helm and hauberk; between S O. [Pl. II. 5.]
3. 6. Bare head of St. Ursus facing; between S O, the letters leaning outwards, to give room for the type. [Pl. II. 6.]

Several varieties of this type.

4. 6. Lion passant to l. No lettering. [Pl. II. 7, 8.]

A long series of this type is in the Townshend Collection, showing several varieties. The type with S O on either side of the lion is, however, not here represented.

TOTTNAU. AUSTRIAN DUCAL MINT.

Quadrangular; type in plain raised circle.

14th Century.

5. Diademed head to l.; between T O. [Pl. II. 9.]
5. Shield bearing a fess; between T O.

TÜNGEN. MINT OF THE SEIGNEURS OF KRENKINGEN.

Eight examples of the following:—

14th Century. Quadrangular; type in plain circle.

6. Head to l., wearing a high conical cap, the point curving backwards; between T $\frac{\alpha}{V}$. [Pl. II. 10.]

URI. CANTON.

No bracteates. There are here several small sixteenth-century coins of the following type:—

Circular; type in raised plain circle.

5. Bull's head facing; between V R I.

WALDSHUT. AUSTRIAN MINT.

Quadrangular; type in plain raised circle.

14th Century.

7. Helm to l., with peacock crest; between W A.

ZOFINGEN. TOWN MINT.

The coinage falls into two well-marked divisions:

A. Before 1285, when the town was sold to Austria.

B. After 1285, under Austrian rule.

A. *13th Century.* Quadrangular; type in plain raised circle.

1. 6. Bust facing, bare head, with long hair; round it the letters Z O V I; between the letters a sun, a crescent moon, and a sun. [Pl. II. 12.]
2. 6. ZOVIG. Heads of SS. Felix and Regula conjoined; below, bare head facing (St. Maurice). [Pl. II. 11.]

Both the types show a strong resemblance to those of Zurich. No. 2 is indeed a combination of a well-known Zurich type with that of Zofingen, and argues a close connexion between the two towns.

B. *Late 13th and early 14th Centuries.* Struck under Austria. Quadrangular; type in plain raised circle.

3. 5. Crowned head facing, with long hair; between Z O. [Pl. II. 13.]
4. 5. Similar, but with pearled necklace.
5. 6. Similar, but of more careful work, and on a thick and more carefully squared flan. [Pl. II. 14.]

This may be compared with Nos. 9, 10, and 11 of this series. Both are much heavier and larger than the ordi-



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AUTOTYPE

nary coinage, and of far finer workmanship. They seem to be rather of the nature of medals than coins, and occur nowhere but at Zofingen, which was the only Austrian mint in Switzerland proper.

14th Century. Quadrangular ; type in plain circle.

6. .6. Coronet, with peacock feather crest. [Pl. II. 17.]
7. .7. Visored helm facing, with similar crest. [Pl. II. 16.]
8. .5. Helm to l., with similar crest, between Z O.
9. .9. Helm to l., with tall crest, between 3 O ; concave field. [Pl. II. 15.]
10. .8. Coronet with peacock feather crest ; a broad sunk circle round the type.
11. .8. Helm to l., with peacock feather crest, between Z O ; concave field. A variety occurs with 3 O.

The three last types are larger and finer than Nos. 6, 7, and 8, and are struck on thicker flans. See remarks on No. 5.

15th Century. Circular ; type in plain raised circle.

12. .6. Helm to l., with feather crest ; between Z O.

ZUG. CANTON.

No true bracteates.

16th Century. Small circular one-sided coins.

1. .5. Arms of Zug, ar. a fess az., round which Z^vG in a plain circle.
2. .5. Similar, but circle of pellets.

ZURICH. MINT OF THE ABBEY OF FRAUENMÜNSTER.

HALF-DRACTEATES.

11th and 12th centuries ; roughly quadrangular.

1. .8. *Obv.*—Temple in pearled circle.

Rev.—Cross botoné between four annulets. [Pl. II. 18.]

Eight specimens of this type, all have had legends on the obverse, and possibly on the reverse also ; but on both faces they have been destroyed partially or entirely, as above described. The obverse legend seems to be ZVRICH.

2. .7. *Obv.*—Temple, with flanking towers, two annulets above and two on the building ; below, an uncertain object, perhaps a head ; the whole in a pearled circle.

Rev.—Type destroyed by obverse ; the outer pearled circle alone remains.

3. .7. *Obv.*—Building with gabled central tower, flanked by gables ; across the façade, remains of an inscription written backwards, probably TVRE6VM ; below, traces of some device.

Rev.—Blank.

4. .8. *Obv.*—Beardless head, facing.

Rev.—A saltire over a Latin cross, within a border of crescents.

5. .8. *Obv.*—Bearded and diademed head facing.

Rev.—Almost destroyed ; probably similar to No. 4.

The head on this coin may be that of St. Felix.

6. .6. *Obv.*—Head facing, pastoral staff to l.

Rev.—As No. 4, but in a pearled circle.

This head is apparently a female head, and may, therefore, be one of the Abbesses of Frauenmünster.

BRacteates.

Late 12th and 13th Centuries. Quadrangular; type in plain raised circle.

1. .6. X ZVRICH. Bare heads of SS. Felix and Regula conjoined, looking r. and l. [Pl. II. 19.]
2. .6. X ZVRICH. Bare heads of SS. Felix and Regula conjoined, one facing, the other looking r.; above, a crescent moon; below, to l., sun. [Pl. II. 20.]
3. .7. X ZVRICH. Diademed head of St. Felix to l., with short hair. [Pl. II. 21.]

13th and 14th Centuries. Quadrangular; type in plain raised circle.

4. .6. Diademed head of St. Felix to l.; short hair. TVRÆGVM.
5. .6. Bare head of St. Felix to l.; waved hair. TURÆGVM. [Pl. II. 22.]
6. .6. Similar, but later in style, and legend, ZVRICH.
7. .6. Bare head to l., either St. Felix or St. Regula, with waved hair and halo; between, Z $\frac{I}{V}$. [Pl. II. 23.]

The latest in date of this series.

8. .6. Head of Abbess of Frauenmünster facing, with veil and beaded diadem, and beaded necklace or collar to dress. ZVRICH.

The workmanship of this coin is superior to that of any other in the series.

9. 6. Similar, but of inferior style ; a row of pellets below neck ; legend, Z $\frac{I}{V}$.

Late 14th and early 15th Centuries.

10. 6. (Debased type of No. 7.) Bare head to l., with waved hair ; between, Z $\frac{I}{V}$. [Pl. II. 24.]

15th Century to 1524. Circular ; type in plain raised circle, with concave border ; in the latest examples a circle of pellets on the border.

11. 6. Bust of the Abbess facing, with veil ; between, 3 $\frac{I}{V}$; sun and moon on either side of neck ; four pellets on the raised circle. [Pl. II. 25.]

Compare with this coin No. 5 in the Schaffhausen series, having four pellets on the outer circle. Varieties of this type, of very bad style, occur here, the sun and moon being generally omitted.

12. 5. Head of Abbess to l., with veil ; between, 3 $\frac{I}{V}$.
 13. 5. Similar, but head is facing ; a row of pellets above and below ; a circle of pellets on border.
 14. 5. Head of Abbess facing, with veil ; a circle of pellets on border.

The latest of this series.

TOWN MINT, FROM 1524.

Small one-sided coins, with type of the arms of Zurich on a shield ; above the shield, Z.

One other coin remains to be noticed here.

Late 12th Century. Quadrangular ; flat fabric.

16. 7. In a pearled circle * ZVRICH (retrograde), round an inner circle, in which is a small cross. [Pl. II. 26.]

This, as not being of distinctively ecclesiastical type, has been assigned to the town mint. But at the date the town had no right of coinage. It must, therefore, be assigned either to the abbey, or to a temporary mint, such as the Emperors of Germany were accustomed to set up in any town where they might be staying.

A variety of this coin has the inscription written wrong-handed, *i.e.*, so that the incuse on the back of the coin reads correctly.

UNCERTAIN.

A few bracteates in the collection must be classed under this unsatisfactory head:—

1. 7. Eagle's head to l., cross to l. of head; in circle of large pellets; quadrangular. Attributed to the town of *Frauenfeld*.
2. 6. Double-headed eagle displayed in circle of large pellets; quadrangular.
3. 6. Six-pointed star, round which six pellets in plain raised circle; quadrangular, of 13th century style. Attributed to the Abbey of Wettingen. [Pl. II. 27.]
4. 8. Half-length figure facing, wearing the early two-pointed mitre; pastoral staff in r., book in l.; above the book a lis; above the head of staff a Latin cross; below it, a cross with a long stem; in the field, two annulets; and below the figure a fish to r. The whole in a plain raised circle in a border of pellets. [Pl. II. 28.]

Of Swabian fabric, circular, late 12th or early 13th century.

It only remains to notice a few one-sided gold pieces, though these are of late date, and are probably only jetons.

The earliest here are of Zurich, of the sixteenth century :—

1. *N.* ·6. Arms of Zurich on shield ; above, Z. The whole in a pearled circle.
2. *N.* ·6. Similar, but with a rose on either side of shield.

Two of St. Gall ; seventeenth century ; small concave coins :—

- N.* ·4. Bear walking to l., in milled circle.

One of Zug ; eighteenth century :—

- N.* ·6. Arms of Zug in oval shield, with scroll-work ; in a plain circle on a square flan ; in the angles of the square the date 1701.

C. R. PEERS.

IV.

COINAGE OF THE ISLE OF MAN.

(See Plates III.—VI.)

CHAPTER I.

BRIEF HISTORY OF THE ISLE OF MAN.

THE earlier history of the Isle of Man appears to be veiled in obscurity. Mananan MacLyr was the first of the mythical rulers of the island, whilst Druidism was the religion of the people, and was, according to tradition, ousted from his position by St. Patrick, who introduced Christianity from Ireland and left a bishop, one Germanus (A.D. 448-478) as ruler. The government then seems to have remained in the hands of the Church until the middle of the tenth century, when Man was conquered by a son of the King of Denmark, who became the first of a line of kings known as Orrees. One of these, Macon, King of Man, rowed Edgar, the first King of all England, on his journey up the River Dee in the year A.D. 973. The last of these Orrees, Reginald II, left an only daughter, Mary. She was not only Queen of Man,

but also Countess of Stragherne, and having to flee the island, carried with her the deeds and charters, relating to the country, to Edward I of England at Perth, where he then was, A.D. 1290. The cause of her flight was the invasion of her kingdom by the late King of Scotland, who landed at Ronaldsway, in the south of the Island, and took possession of the country. During the reign of Edward II, the kingship of the Island passed to Piers Gaveston, who was also Earl of Cornwall, A.D. 1307. During this year the Isle of Man was also in the hands of Henry de Beaumont and Gilbert de Macgaskell. Edward Bruce, brother of Robert Bruce, King of Scotland, invaded and conquered the Island, A.D. 1314. Randle, Earl of Moray, received it as Lieutenant-General from the Scottish crown, and subsequently William Montague, Earl of Salisbury, gained the Isle of Man from the Scotch, and was crowned as King, A.D. 1334. In A.D. 1394 the sovereignty passed by purchase to William Scroope, Earl of Wiltshire, from the son of the above-mentioned William Montague.

William Scroope having been executed for treason, the Isle of Man was given to Henry Percy, Earl of Northumberland. The tenure of the Isle of Man by the Earl of Salisbury and the Earl of Northumberland consisted in carrying the sword of Lancaster at the coronation. The kingdom passed in 1406, at the death of the Earl of Northumberland after the Battle of Shrewsbury, to Sir John de Stanley, who bequeathed it to his son, who was the father of Sir Henry Stanley, Lieutenant of Ireland and Lord Chamberlain to Henry VI, by whom he was created Lord Stanley. Subsequently, in the reign of Henry VII, he was made Earl of Derby, Constable of England, and Knight of the Garter.

The earlier rulers of the Isle of Man styled themselves

Kings of Man; but the Derbys, and subsequently the Athols, were satisfied with the lesser title of Lord of Man, as less offending to their sovereign the King of England.

The above-mentioned Earl of Derby had a son, George, who died during the lifetime of his father, leaving a son, Thomas, who succeeded his grandfather and united the title of Strange with that of Derby in the right of his mother. His son Edward was the father of Henry, who in turn was followed by Ferdinand, who was succeeded by his brother William, father of James. This James is perhaps the best known of the Derby family, on account of his great devotion to the House of Stuart, which only ceased with his life. Captured after the battle of Worcester, he was executed at Bolton, and buried at Ormskirk, A.D. 1651. The Island was at this time held on his behalf by his heroic countess, and was betrayed into the hands of the Commonwealth by William Christian.

After the surrender of the Island, it was granted to General Lord Fairfax, who held it till the Restoration of Charles II. After the Derby family returned to power, William Christian was tried, found guilty of high treason, and shot at Hango Mount, near Castletown.

Charles, son of the great James, then became the ruler, and at his death the Island passed to his son William, who died at Chester, A.D. 1702. He was followed by James, the last Earl of Derby who was Lord of the Isle of Man. He died at Knowsley in 1736, when the lordship passed to John, second Duke of Athol, he being the grandson of Lady Amelia Stanley, Marchioness of Athol. Lady Amelia was the third daughter of James, the great Earl, who died, as before mentioned, in 1651. The Duke

of Athol dying in 1754, the kingdom devolved upon his daughter, Lady Charlotte Murray, Duchess of Athol, she having married her cousin John, the third duke, in 1753.

The tenure of the Island during the Lordship of the Derbys and Athols was the presentation of a cast of falcons at the coronation.

In the year 1765 the Isle of Man became incorporated with the British dominions by purchase from the Duke and Duchess of Athol for the sum of £70,000.

Certain rights and prerogatives were, however, reserved, which were subsequently sold to the English crown in 1829 for an additional sum of £132,944.

CHAPTER II.

ORIGIN OF THE TRIUNE.

BEFORE entering upon a detailed description of the Manx coinage, it would no doubt be of interest to look at the earlier examples and meaning of the curious heraldic bearing, which forms the arms of the Isle of Man, viz.:—gules, three legs, armed, conjoined in fesse at the upper part of the thighs, flexed in triangle, garnished and spurred, or. Motto: “Quocunque jeceris stabit.” “Whichever way you throw it, it will stand.”

Let us first consider the probable origin of this symbol, which is variously known as the Triune, Triskelis, and Triquetra. Many theories have been suggested to account for this remarkable emblem, but the most reasonable

is that of Müller, who suggests that it shows rotatory movement, and that it is probably an emblem of the sun.



1.



2.



3.



4.



5.

How often do we find that anything may be symbolised by a part? In this way, the sun being regarded in antiquity, and so represented as a bright chariot, driven daily across the sky by Phœbus, and thus typified on some early coins of Rome, might easily be recognised as a single wheel (see fig. 1). Compare, Drachm of Phlius, B.C. 430-322. Now the tendency in symbolism is always to reduce everything to its simplest form, and hence, as no wheel can have fewer than three spokes, it comes to be drawn as fig. 2.

If now we break the rim of the wheel at three corresponding points, we obtain fig. 3. Now, by further increasing the distance of the free ends of the rim from the axle it would appear as fig. 4. Afterwards, probably with a view to showing rapidity of movement, this device was humanised, feet were added, and in some instances Phallic attributes, and at a later period Talaria, such as we find on the statues of Mercury and Perseus (fig. 5). Examples of figs. 4 and 5 occur on the coins of Lycia.

By a corresponding process we may obtain the Swastika

from a wheel with four spokes. The earliest example of the humanised form of the symbol, known as the Triskelis, is to be met with on a coin of Aspendus, a town in the region of Pamphylia, in Asia Minor, which appears to be of no later date than the year B.C. 500 (Pl. III. 1). Another example is found on a later coin of Aspendus, *circ.* B.C. 400—300 [Pl. III. 2]. On a Panathenaic vase of early date in the British Museum, the Triquetra occurs as an armorial bearing or badge on the shield of a warrior. There are examples of this symbol to be met with on *figilia* in the Vatican collection, and doubtless elsewhere. In some cases the limbs of the Triskelis are not joined at the thighs, but are coupéd. In the earlier examples of the Triskelis on the coins of ancient Greece, a boss appears at the point of junction of the limbs, which in later types becomes developed into the Gorgon head. This is most noticeable on the silver coin of the Cornelia Gens of Rome, *circ.* B.C. 49. [Pl. III. 4]. We find the same device on a Roman intaglio in sard, once in the collection of Mr. C. W. King, and now in the New York Museum, in which the Triune appears joined together by the head of Medusa; while between the two lower limbs are ears of corn, and in the upper part is a hammer, a possible punning allusion to the owner's name, MAL-LEOLVS. This gem is supposed to be symbolic of the province of Sicily, and bears a close resemblance to the Roman coin mentioned above.

Now it has been thought that the Triskelis, pointing, as it does, in three directions, might possibly represent the island of Sicily, which was called "Trinacria," on account of its three-cornered character, but though the Triune subsequently, in the year B.C. 317, appears on the coins of Syracuse in the time of Agathocles [Pl. III. 3],

yet it is clear from this lateness of date that this was but a secondary attribution, which may then have been used from its fancied resemblance to the three capes of the island, viz., Lilybaeum, Pachynus, and Pelorus.

The Triskelis still forms part of the arms of the Two Sicilies, and is represented on the five-lire piece of Joseph Napoleon, struck in 1806, while the early postage stamps of Sicily also bear this device.

There are some who would see a Phallic origin for the Triskelis, and who point to the resemblance it bears to the Crux Ansata, the Egyptian emblem of generation and immortality, and this theory seems fairly feasible.

CHAPTER III.

THE APPLICATION OF THE TRIUNE TO THE ISLE OF MAN.

WE must now see in what manner the Triune came to be used as the arms of the Isle of Man. As mentioned earlier, the island acknowledged the sway of the Danish Kings for some long period, and it was during this time that we first meet with this symbol.

It is well known that during the tenth and eleventh centuries the whole seaboard of Europe was subject to the devastating expeditions of the Northmen, and Sicily was among other countries overrun by these rude hordes.

There they would constantly meet with the three-legged sign, which would recall to their minds a somewhat similar symbol on their own bracteates or coins. These date from the ninth to the twelfth centuries. There would also be a close resemblance to the Fylfot cross, which, identically with the Swastika, is but the four-limbed

version of the same emblem in its primitive and un-humanised form.

The original badge of the Island was a ship, with one sail, which appears thus on the seals of two charters of Harald, A.D. 1245 and 1246. The inscription around the ship, as shown by another seal, now destroyed, was **REX MANNIÆ ET INSULARUM**.

Do we find any example of the use of the Triskelis during Scandinavian times? We do. There is still preserved a curious sword of state, which was formerly carried before the Lord of Man at the Tynwald Court, upon which occurs the Triquetra, in the centre of which, at the point of junction of the thighs, is a face-like object, within a triangle. This sword is said to date from the end of the twelfth century. It thus appears that at one time both badges were in use, and it is probable that the Triskelis from being at first a mere symbol, tribal, or national, became developed into the true arms of the country, entirely supplanting the former one, viz., the ship.

The introduction of the Triune has been by some attributed to Alexander III of Scotland, who was King of Man and the Isles, 1266-1286. The wife of this ruler was the sister of the Queen of Sicily, and it is thus highly probable that he introduced, or at all events extended, the use of the Triskelis, as the badge of the island.

The position of the Isle of Man as regards the three surrounding kingdoms, viz., England, Ireland, and Scotland, was very similar to the relation of Sicily to Italy, Carthage, and Greece, and in like manner, if attacked by any one, she would still be able to fall back upon the other two countries for assistance and protection, and hence, as the motto implies, would be enabled to stand. This motto, **QUOCUNQUE JECERIS STABIT**, first appears in

A.D. 1310, or, in other words, about thirty years after the departure of the Scandinavian rulers from the Isle of Man.

In the earliest examples of the armorial bearings of the island, we find the legs are represented as unclothed. Later, in the fourteenth century, a period when it was customary to protect the limbs with armour, the heralds added this, no doubt to be in keeping with the times. We now find that the talaria, used in the classic form of the symbol, as emblems of celerity, have undergone a change, and have been transformed into spurs, and this fashion of the triple legs spurred and armoured has been the accepted form of the Maux armorial bearings from this period to the present time.

They are blazoned thus, "gules, three legs, armed, conjoined in fesse at the upper part of the thighs, flexed in triangle, garnished and spurred, or." Motto, Quocunque Jeceris Stabit, "whichever way you throw it, it will stand." On the old House of Keys occurred the following lines:—

" Three legs armed ;
 Armed in self defence :
 Centrally united ;
 Security from thence."

CHAPTER IV.

EARLY CURRENCY OF THE ISLAND.

In all primitive communities the discharge of debts and other commercial transactions would be arranged by a system of barter, payment being made in produce or in kind. This system of exchange was superseded by a coinage of uninscribed pieces, as early as 150 B.C. in England ; but

of the coins of this period none have been found in Man, nor can any be attributed to the island.

The earliest examples of coins found in the Isle of Man are those of the Romans, the island having been brought under the Roman dominion shortly after the conquest of England, and being at that time known as Mona. Traces of the invaders' influence may, even at the present day, be seen in the remains of their copper and lead mines at Braddah and Iangness. Several finds of Roman coins have occurred there, as elsewhere in the island.

The next coins in use were those of the Saxons, and we have numerous examples of their coinage, which have been found in various parts of the Isle of Man, most noticeably near Douglas in 1892. Amongst others, we meet with specimens of the coins of Athelstan, Edred, Edwy, Edgar, Eadweard II, Aethelraed II, Cnut, Edward the Confessor, and from that point onwards through the early Norman and English series.

Coins of Ireland, Scotland, and Denmark have also been discovered, the island having been under the influence of these several kingdoms.

Up to the end of the thirteenth century no coins can be described as especially struck for use in the island. The earliest Manx coin proper is said to have been issued in 1324, when the Duke of Albany struck a gold piece for insular use, bearing an impression of the arms of the island, and five years later, in 1329, the Scotch Governor, Martholine, issued a copper coin, the obverse bearing the King's head, whilst on the reverse was a cross, and the legend CRUX EST CHRISTIANORUM GLORIA.¹ These

¹ See Clay, *Manx Currency*, pp. 23, 26, 27; Oswald, *Vestigia*, p. 124; and Sacheverell, *Island Survey of the Isle of Man*, ed. 1702, p. 72.

are the only examples of the work of mediæval moneyers ; and though it has been said that the Isle of Man had in the Middle Ages, some say in A.D. 1577, a currency of leather money, no specimens have come down to our time. This no doubt would be due to the perishable nature of the material from which they were made ; but a great doubt exists as to the authenticity of this statement, and it does not seem probable that such a system of leather tokens was ever in use.

Until the middle of the seventeenth century, the Isle of Man, having never had a coinage of its own, with the possible exception of the two pieces just alluded to, was dependent upon the currency of the surrounding countries. The greater part of the island's trade was at that time carried on with Ireland, and hence it happened that the tokens and coins of this country formed the great medium of exchange between these two kingdoms.

The first pieces to be considered as current in the Isle of Man, are those commonly known as the St. Patrick's half-penny and farthing, which undoubtedly served the purpose of an accepted currency. The origin and date of these coins have not yet been accurately determined, and the leading authorities on this interesting question are by no means agreed. For instance, the Rev. H. Christmas thought they belonged to the reign of Charles I, and that they were struck in Dublin in the year 1642, and accordingly he classes them amongst the Irish siege pieces. On the other hand, Dr. Aquilla Smith considers them to belong to the period between 1660 and 1680. Simon places them as having been struck in 1643. My own opinion is that they were struck during the year 1678, and I base my idea on the fact that the State of New Jersey authorised these pieces to be current in that

country in 1682. A large supply had been imported by Mark Newby during November 1681, and this would have been impossible if they had not been issued about the same time. They must have been struck about the beginning of 1678, as the Tynwald act quoted at the end of this chapter refers in particular to this issue. Additional evidence as to the date of these pieces may be gained from the St. Patrick's farthing described below.

Obv.—Figure of David as usual, beneath which are a martlet and the figure 8.

The martlet was a mint-mark on the Irish copper coins of Elizabeth, and the figure 8 seems to point to the year 1678 as the date of issue.

The coins may be described as follows :

HALFPENNY.

Obv.—FLOREAT REX. m.m. star. King David kneeling and playing on the harp, over which is a crown.

Rev.—ECCE · GREX. St. Patrick standing, mitred, bearing a crozier in his left hand and a trefoil in his right, which he holds extended over a group of seven people, who are standing before him. The arms of Dublin, viz., a shield with three castles, are supported by two figures. Weight 148 grs., diameter 28 m.m. Edge engrailed vertically.

[Pl. III 5.]

On some examples the legend reads FLORE AT REX ☆. The letters on some coins are of large size, on others of small.

FARTHING.

Obv.—As on Penny, without m.m.

Rev.—QVIESCAT · PLEBS. St. Patrick standing, holding in his left hand a double or metropolitan cross, whilst with his right hand he drives out reptiles

(Protestants?). Behind and to the right is a church with steeple. Weight 77—105 grs., diameter 25 m.m. Edge engrailed vertically.
[Pl. III. 6.]

The halfpenny and farthing exist in copper with a plug of brass, and, it is said, in brass with a plug of copper. The plug is on the obverse, and is impressed with the crown.

Several dies were evidently in use, as the legends on *obv.* and *rev.* differ in punctuation, and in the size and formation of the letters.

There exist proofs both of the halfpenny and farthing in silver. That of the halfpenny is of extreme rarity; of this coin there was an example in the cabinet of Dr. Aquilla Smith, the weight of which piece is 176·5 grains. The farthing is less rare, though seldom met with: this piece weighs 114 grs. in silver, and a proof is also known in lead. The edge of these proofs is as on the current coin.

We now come to the first coin struck solely for insular use. This is known as Murrey's Token. It appeared in 1668, and consists of two varieties.

FIRST VARIETY. PENNY, BRASS.

Obv.—IOHN · MVRREY · 1668. m.m. cinquefoil.
Within dotted circle, in three lines, HIS PENNY
I. ⌘ M.

Rev.—QVOCVNQVE · GESSERIS · STABIT; m.m. cinquefoil. The Triune, feet to left, spurred, within dotted circle, rim toothed on both sides. Edge, plain. Weight 31—36 grs., diameter 20 m.m.



SECOND VARIETY. PENNY, BRASS.

Obv.—IOHN · MVRRAY .: 1668 †:

In the centre HIS
PENNY
I † M

Rev.—QVOCVNQVE · GESSERIS · STABIT ·

enclosing OF
DOUGLAS
IN · MAN.

Weight 40 grs., diameter 21 m.m.

It is considered probable that these Murrey's Tokens were not struck in the Isle of Man, but at Birmingham.

Returning to the Irish tokens which passed current in the island, we find Mic Wilson's halfpenny, struck in Dublin in 1672, and the Limerick Butchers' halfpence of 1679.

HALFPENNY, BRASS.

Obv.—MIC WILSON OF DVBLIN. The Butchers' Arms.

Rev.—HIS HALFPENNY · 1672 · Figure of St. George, with lance, riding to the left over a prostrate dragon.
[Pl. III. 7.]

The size and quality of the work shown on these coins, which exist only in brass, vary greatly. The edges of most pieces are engrailed vertically.

Two principal varieties exist.

I. Coin of superior design, large flan, edge engrailed vertically, weight 66 grs., diameter 20 m.m.

II. Coin of inferior workmanship, small flan, edge plain, weight 63 grs., diameter 18 m.m.

This latter piece may possibly be one of the forgeries, which are mentioned by Dr. Clay in his work on the Manx

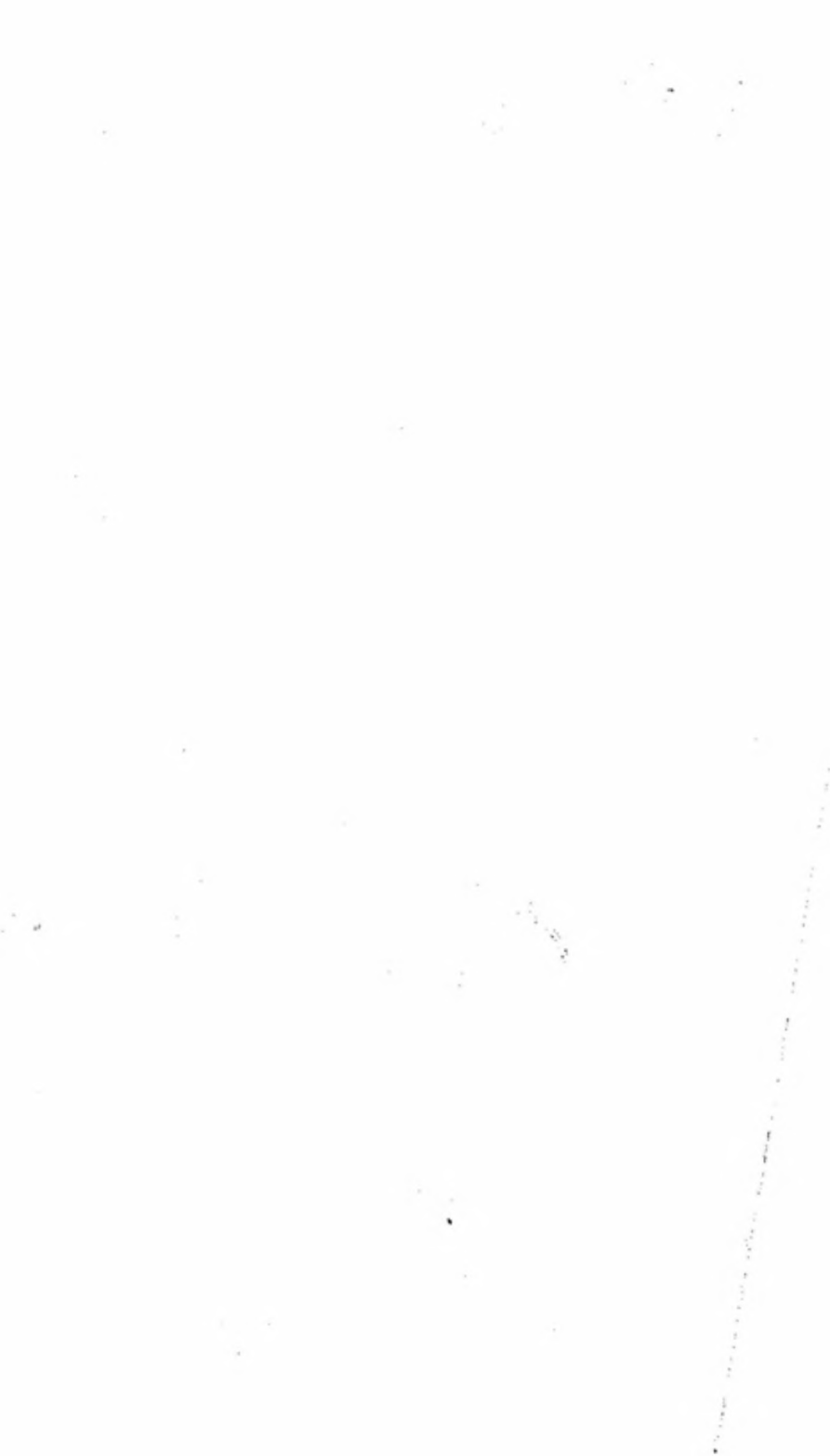


COINS & TOKENS

OF THE

ISLE OF MAN.

AUTOGRAPH



coinage, though he speaks of them as existing in copper, whilst this is of brass. I might add that I have not as yet met with a specimen struck in copper. Two Butchers' tokens appeared also from Limerick.

LIMERICK TOKEN. HALFPENNY, BRASS.

Obv.—LIMERICK ☼ BVTCHERS. Within which the Agnus Dei.

Rev.—HALFPENNY ☼ 1679. The Butchers' Arms.
Edge, plain. Weight 48 grs., diameter 20 m.m.

A second token was issued at Limerick in 1679, which may also be considered as a Butchers' halfpenny, and hence to come within the meaning of the Tynwald Act.

LIMERICK TOKEN. HALFPENNY, COPPER.

Obv.—THO · LINCH OF LIMRICK ☆ Enclosing the crest of the Butchers' Company, viz., a winged bull.

Rev.—HIS · HALFPENY TOKEN · 1679 ☆ Surrounding a harp. Edge, engrailed vertically. Weight 66 grs., diameter 20 m.m. [Pl. III. 8.]

The Murrey's pence of 1668 were legalised as currency, and the Butchers' and St. Patrick's Tokens were demonetized by the Tynwald Act of the year 1679, which is as follows:

TYNWALD ACT OF 1679.

"It is ordained, and enacted at the Tynwald holden 24 June, 1679, that no copper or brass money, called Butchers' halfpence, Patrick halfpence, and copper farthings, or any other of that nature, shall pass in the island after the 1st day of January next, or be paid or received by any manner of persons in exchange or payment

after the said day, upon the penalty of three pounds to our Honourable Lord's use, and further punishment at the Governor and officers' discretion. Provided always this shall not be prejudicial to, nor hinder the passage of, the King's farthings and halfpence, set forth and authorised, or of the brass money called Ino Murrey's pence, but that the said may still pass according to order, until it be otherwise declared to the contrary."

CHAPTER V.

INSULAR COINAGE UNDER THE DERBY FAMILY.

IN 1709 were issued the first coins for use in the Isle of Man, bearing the crest of the Derby family. This crest is the well-known Eagle and Child, with the motto SANS CHANGER.

It will perhaps be interesting to relate here the legend as to the origin of the Eagle and Child of the Derby badge. Early in the fourteenth century Sir Thomas De Lathom was walking in a wild part of his park with his wife, who was childless. In this place, it was said, an eagle had its nest. On coming near this spot they heard the cries of a child, which was found by the servants dressed in rich swaddling clothes lying in the nest. Sir Thomas, having no family, adopted the heaven-sent child, and had it baptized in their own name. The child became the heir, and on dying left an only daughter, Isabel, who married Sir John Stanley, who, in memory of the event, took the Eagle and Child as his crest, which has continued the crest of the Derby family to this day.

In the previous pages we traced the Triskelis to an early original on the coins of Aspendus. It will not, then, be surprising that in like manner we may meet with a very similar prototype of the Eagle and Child on the coins of the towns of Elis and Agrigentum. In this case, however, the eagle is rending a hare, in place of picking at a child. In some cases there are two eagles, one tearing the hare, whilst the other raises its head, screaming the while.

The issue of 1709 consists of pence and halfpence in copper. The peculiarity of these pieces lies in the fact that they were *cast*, not struck, as was the case in each subsequent issue. This need give rise to no surprise, when we remember that this occurred with the copper coins of England about this period. *Vide* Montagu, *Copper Coins of England*, p. 74, 2nd edition.

PENNY, COPPER.

Obv.—⌘ SANS ⌘ CHANGER ⌘ 1709. Eagle and Child upon cap of maintenance, above which is the motto, and beneath the date.

Rev.—QVOCVNQVE ● GESSERIS ● STABIT ⌘ The Triune armoured and spurred, feet to left, surrounded by the legend; edge plain. Weight 134 grs., diameter 29 m.m. [Pl. III. 9.]

There is an example of the penny in silver of very rough work, which appears to me to be a fabrication. Of the halfpenny there are two distinct varieties:—

1. HALFPENNY, COPPER.

This coin is identical with the penny, with the exception of the roses in the legends, which are, in the case of the halfpenny, represented by pellets. Weight 86 grs., diameter 24 m.m.

2. HALFPENNY, COPPER.

Obv.—As on No. 1.

Rev.—As on No. 1, except that the lettering is superior, the letters being hollow, whilst each word is separated by an annulet in place of a pellet, and reads ☉ QVOCVNQVE ☉ GESSERIS ☉ STABIT. Weight 85 grs., diameter 24 m.m.

As before mentioned, these pieces were cast, and some few specimens have come down to us in which the casting-tag, a V-shaped piece of metal, still remains, not having been cut off. In some instances, particularly in that of the halfpenny, the metal has incompletely filled the mould, and thus the date, the tail of the figure nine being missing, was blundered from 1709 to 1700. This has given rise to error, as was also the case in the issue of 1725.

In the year 1721 we come to the first of a series of pattern pieces, issued in all probability by William Wood, who is more generally known, on account of the extensive coinage he prepared for Ireland and the North American Colonies, by reason of the important part the former pieces played in Irish history.

PATTERN HALFPENNY.

Obv.—* SANS * CHANGER * Eagle and Child, on cap of maintenance, beneath which, the date, J72J.

Rev.—* QVOCVNQVE · GESSERIS · STABIT * * The Triune armoured and spurred, feet to left, rim on both sides beaded; edge plain. Diameter 25·5 m.m. Weight 82 grs.

The coinage of 1723 consists of pence and halfpence, and these exist in silver, copper, and prince's metal.

PATTERN PENNY, COPPER.

Obv.—SANS · CHANGER · 1723. Eagle and Child as on the issue of 1709.

Rev.—QVOCVNQVE · GESSERIS · STABIT ∴ The Triskelis armoured and spurred, feet to right. Diameter 28 m.m. [Pl. III. 10.]

The rim on both obverse and reverse is beaded.

PATTERN HALFPENNY.

Obv.—As on Penny.

Rev.—As on Penny, omitting ∴ Diameter 25 m.m. [Pl. III. 11.]

The edges of the silver specimens of both values are engrailed diagonally, whilst those of the others are plain.

The weight of these coins varies considerably, as will be seen from the table subjoined.

PENNY.		HALFPENNY.	
Æ	℞	Æ	℞
164 grs.	126·5 grs.	122 grs.	60·1 grs.
144 „	124 „	92 „	58 „
184 „		78 „	55 „

All the above were taken from pieces in very fine preservation, with the exception of a copper piece which was much worn, and yet weighed 164 grs. This piece no doubt makes a pair with the first-mentioned copper halfpenny, and was probably issued as a proof.

I have in my collection a specimen of the penny struck in prince's metal, in which the V's on the reverse are

barred thus: V, and consequently resemble inverted A's; the legend hence reads: QVOCVNQVE, &c. This piece, from its perfect roundness, appears to have been struck in a collar. *Vide Montagu, Copper Coins of England*, p. 75.

The copper specimens of the penny are often irregular in outline, and frequently somewhat cracked round the edge. Some of the pennies appear to have been mis-struck, and so cause a double reading of the legend.

These coins are of great beauty, and are difficult to obtain in very fine preservation, which may be accounted for by their low relief, which very soon shows signs of wear. This fact very probably caused their rejection by the insular authorities. The Triskelis as represented on every issue of the Derby family, except those of 1709 and 1732, has pellets on the armour, and thus there is a close resemblance to the Cheyne brass at Drayton Beauchamp Church.

The next piece struck by Wood is a pattern penny in copper, dated 1724.

PENNY.

Obv.—SANS · CHANGER · 1724. Eagle and Child as usual on cap of maintenance. The neck of the eagle is short and thick, and the tail is straight across the base, and not spread fanwise, the wings are also somewhat short.

Rev.—QVOCVNQVE · GESSERIS · STABIT ∴ The Triune armoured and spurred, progressing to the right, much flexed, and of coarser work than the coinage of 1723. Edge plain. Diameter 28 m.m.

This piece, which is said to be unique, was once in the collection of Dr. Clay, whence it passed to that of Mr. Shorthouse. Its great rarity is supposed to be due to the presence of a flaw-mark on the obverse, running from the

left lower quadrant upwards in front of the cap. The die was probably fractured in the striking of this single example. Compare with this the Irish penny of 1789, a pattern struck by Mossop, the die for which broke on the sixth example. My own specimen of this Irish coin shows the flaw in an early stage of development. It is, however, not unlikely that this coin of 1724 is a fabrication.

Of the date, 1725, there occurs the following coin which was for a long time assigned to the year 1705, as previously mentioned, and in place of its being—as it really is—a pattern, in silver, for a penny, it was considered to be either a medal or a half-crown.

1725. PATTERN PENNY IN SILVER.

Obv.—SANS · CHANGER · 1725. Eagle and Child on cap of maintenance; the tail of the eagle is fanwise.

Rev.—QUOCUNQUE · GESSERIS · STABIT ∴ Triune armoured and spurred, feet to right, edge engrailed diagonally. Weight 219 grs., diameter 33 m.m.
[Pl. III. 12.]

The error as regards the date was due, no doubt, to the fact that the blank was of insufficient size to contain the whole of the legend, and consequently the figure 2 was reduced to the appearance of a cypher. However, careful observation would have shown that the figure, which was considered to be an 0, was incomplete on the left side, and was in reality the upper portion of a 2.

We now come to the most beautiful coins which ever appeared in the island, unfortunately issued not for currency, but merely as patterns. These are the pence of 1732, of which there are three distinct varieties as follows:—

1. PATTERN PENNY, 1732. LARGE SIZE.

Obv.—SANS · CHANGER, and beneath, the date 17-32.
Eagle and Child on cap of maintenance, dividing the date. At the head of the cradle is an olive branch bearing eight leaves. The neck of the eagle is greatly arched, the tail is short, as are also the wings, which are rounded, in place of being sharp-pointed as on the previous issue.

Rev.—QUOCUNQUE IECERIS STABIT. Triune armoured and spurred, progressing to the left, the feet of which divide the legend, and between the limbs I₁ D = Jacobus Darbiensis One (Penny).
Edge plain. Weight 162 grs., diameter 29 m.m.

2. PATTERN PENNY, 1732. SMALL SIZE.

Obv.—As on No. 1.

Rev.—As on No. 1. Edge plain. Weight 144·2 grs.,
diameter 26 m.m. [Pl. IV. 1.]

3. PATTERN PENNY, 1732. SMALL SIZE.

Obv.—As on No. 1, save that the branch bears only six leaves in place of eight, as on the two former pieces, but no dot between the words of the motto, and the date is divided, 17 being at the head of the child and 32 at the feet.

Rev.—As on No. 1. Edge plain. Weight 155 grs.,
diameter 26 m.m.

In the next year, 1733, appeared the last coinage of the Derby family, after which the Eagle and Child appeared no more, except on a piece dated 1777 (see below, p. 61). The issue consists of pence and half-pence, struck in Bath metal, the material also used for the Rosa Americana series, which with these pieces and those of 1732 were the work of William Wood. This Wood is better known as the object of Dean Swift's

satire in the celebrated "Drapier Letters," on account of the supposed inferiority of his coinage for Ireland.

1733. PENNY. BATH METAL.

Obv.—SANS · CHANGER · 1733. Eagle and child on cap of maintenance, above which is the motto, and beneath the date. The rim is toothed.

Rev.—QUOCUNQUE · IEGERIS · STABIT · The Triune armoured and spurred, joined in a triangle, feet to right. Between the limbs are the letters I₁ D. The rim is as on the *obv.* Edge plain. Weight 146 grs., diameter 29 m.m.

[See Pl. IV. 2.]

I have in my collection a specimen on a flan of extra thickness, the weight of which is 206 grs., that is, sixty grains heavier than the current coin. This appears to me to be a piedfort.

HALFPENNY. BATH METAL.

Obv.—As on the Penny.

Rev.—As on the Penny, except the value is expressed $\frac{1}{2}$ in place of 1, as on the penny. Edge plain. Weight 104 grs., diameter 24 m.m.

[See Pl. IV. 3.]

Of the penny and halfpenny, there are some examples in which the interior of the cap is frosted, whilst in others it is plain.

It is reported that the metal from which these coins were struck was obtained by the melting down of some disused cannon in Castle Rushen, Castletown, thus resembling the issue of gun-money by James II in Ireland.

Silver proofs exist of both the penny and halfpenny, the respective weights being 142 grains and 98 grains. [Pl. IV. 2 & 3.]

There were two separate issues of these pieces; the first amounting to £300 of pence, and £200 of halfpence; the second of £250 of pence and £150 of halfpence, thus making in all 132,000 pence and 168,000 halfpence.

At this time all other issues were declared illegal by the Tynwald Act.

Notwithstanding the fine execution and design of these coins, forgeries became common. Of the penny there exist two varieties, and of the halfpenny only one.

1783. 1. PENNY, COPPER.

Obv.—SANS · CHANGER 1783. Eagle, with thin long neck, greatly arched, wing coming to an obtuse angle with the body, standing on a cradle, as usual, with the date beneath.

Rev.—The Triskelis spurred, feet to right, between the legs the initials I D; the spurs are formed as a simple cross on the ankles. Legend as usual, QUOCUNQUE · IECERIS · STABIT. Edge plain. Weight 106 grs., diameter 27 m.m.

[Pl. IV. 4.]

2. PENNY, COPPER.

Obv.—SANS · CHANGER 1783 · Eagle with short thick neck, not so highly arched as in the previous piece. The remainder as usual.

Rev.—OUOCUNQUE · IECERIS · STABIT; an O taking the place of Q. Triune, feet to right between the limbs; no spurs, I₁ D. The whole in very low relief. Edge plain. Weight 126 grs., diameter 26 m.m.

[Pl. IV. 5.]

HALFPENNY, COPPER.

Obv.—As on the genuine piece.

Rev.—As usual, except the letters between the legs are placed eccentrically, and read $\frac{I\ D}{2}$ in place of $\frac{I\ D}{2}$
 Edge plain. Weight 58 grs., diameter 24 m.m.
 [Pl. IV. 6.]

CHAPTER VI.

THE ATHOL COINAGE.

JAMES, EARL OF DERBY, having died in 1736 without issue, the Isle of Man passed to James, Duke of Athol. The scarcity of copper money again began to make itself felt, and the Duke having been petitioned on this subject, sent over a supply consisting of £250 of pence and £150 of halfpence, *i.e.*, 60,000 pence and 72,000 halfpence. These pieces were struck in 1758, and may be described as under.

1758. PENNY, COPPER.

Obv.—*A D* in monogram, surmounted by a ducal coronet; beneath, the date 1758. The rim is toothed.

Rev.—QUOCUNQUE · JECERIS · STABIT · The Triune armoured and spurred, feet to right; the legs being joined at the hips by three spear-heads, the apices of which meet. The armouring of the knees is coarse and large. Rim as on *obv.*
 Edge plain. Weight 170 grs., diameter 30 m.m.
 [Pl. IV. 7.]

The initials on the obverse stand for Athol Dux.

There is a proof in silver of this penny, which is its exact counterpart, with the exception of the edge, which is

engrailed with a herring-bone design. The weight of this proof is 172 grains. It was no doubt intended that the current coin should have a similar edge. This was probably abandoned on account of the increased expense of so doing. Some specimens have the edge engrailed from right to left, others from left to right.

HALFPENNY, COPPER.

Obv.—As on the Penny.

Rev.—As on the Penny. Edge plain. Weight 90 grs.,
diameter 25 m.m. [Pl. IV. 8.]

A proof of the halfpenny is said to exist in silver.

Many of the halfpennies of this date have a long thin flaw on the obverse, to the left side of the date, extending towards the coronet.

Forgeries of this issue are said to have existed in great number, but I have hitherto failed to meet with any.

CHAPTER VII.

THE REGAL ISSUES.

IN the year 1765 the rights of the Athol family passed by purchase to the English Crown. Twenty-one years later, in 1786, the first of the new regal series of coins was issued. They are splendid pieces, well executed, and are of a higher standard than any previous issue. This coinage consists of pence and halfpence.

1786. PENNY, COPPER.

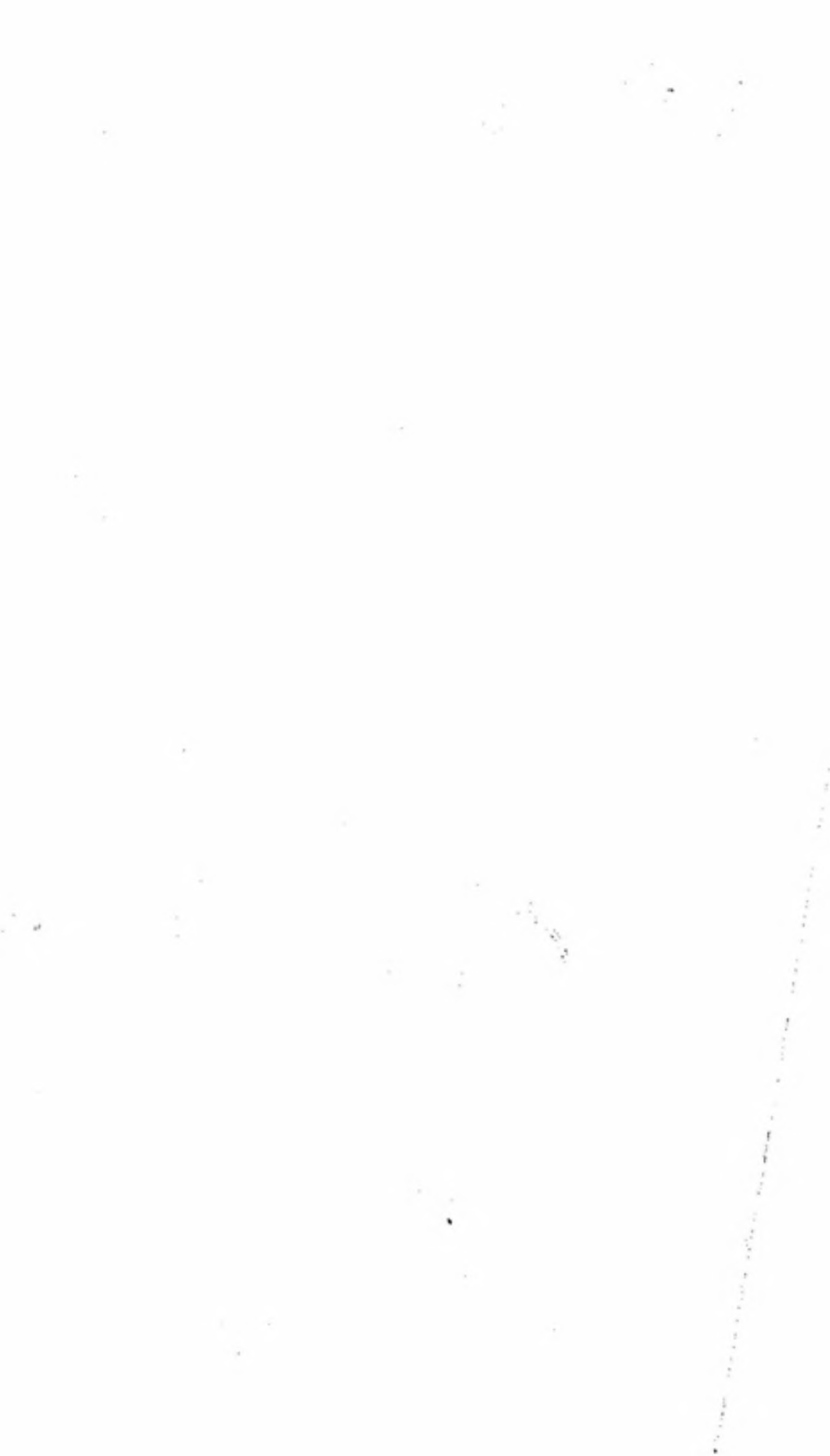
Obv.—GEORGIVS III DEI GRATIA · 1786. Laureate head of George III to right.



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Rev.—QVOCVNQVE · IECERIS · STABIT. The Triune, feet to left, armoured and fleshed, to the centre. The rims of both sides are toothed. Edge engrailed diagonally. Weight 248 grs., diameter 34 m.m.
[Pl. IV. 9.]

A penny of this date is found struck in copper from defaced dies. A raised cross is found on obverse and reverse stretching completely across the coin; the edge of this coin is plain.

HALFPENNY, COPPER.

Obv.—As on the Penny, except the tail of the figure 7 in the date does not turn backwards.

Rev.—As on the Penny. Edge engrailed diagonally. Weight 129 grs., diameter 28 m.m.

There are also copper and bronze proofs of the above coins, and I have in my collection a halfpenny of finely polished bronze, of a light tone, with a plain edge. The tothing of the rim on the obverse is unfinished, and hence the coin is surrounded by a margin, 2 m.m. wide, of unworked metal, which is raised above the field of the coin. The reverse is as on the current piece. This coin weighs 133·75 grains. There are only two other specimens known, one of which is in the National Collection, which is from the same die, and shows a small flaw-mark on the edge of the coin, caused by the failure of the collar to exert equal pressure on all parts. [Pl. V. 1.]

Of the year 1777 a curious piece occurs, which is as follows—

Obv.—Eagle and child; above SANS · CHANGER; beneath, 1777.

Rev.—Triune; no legend or numerals.

This is struck in lead, and is of the same size as the

penny of 1733. It is extraordinary that this type should have been used, as the island had ceased to belong to the Derby family for a period of forty-one years.

The next issue is that of 1798, and is of pence and halfpence. These very closely resemble the so-called cart-wheel pence of England of the date 1797, struck, as these were, at the Soho mint. Küchler was the designer of both these coins.

1798. PENNY, COPPER.

Obv.—GEORGIVS III · D · G · REX · 1798, incuse, on raised rim enclosing laureate and draped bust of the king, turned to the right. On the truncation of the neck are three dots, thus . . .

Rev.—QVOCVNQVE IECERIS STABIT on raised rim, incuse, as on the *obv.* The Triune armoured and spurred, feet to left, covered with short riding-boots, legs fleshed to centre. At the point of junction of the legs are three lines terminating in a tripliform ornament. Edge plain. Weight 339 grs., diameter 34 m.m.

HALFPENNY, COPPER.

Obv.—As on the Penny, except the V in GEORGIVS, which becomes a U, and hence reads GEORGIUS.

Rev.—As on the Penny. Edge plain. Weight 165 grs., diameter 28 m.m. [Pl. V. 2.]

Of these coins there are proofs in copper, bronze, and copper-gilt; and of the penny there is also a silver proof, probably a "re-strike."

The weights of proof specimens are as follows :—


	PENNY.		HALFPENNY.
Copper	. . 339 grs.		165 grs.
Bronze	. . 886 "		159 "
Gilt	. . 275 "		166 "
Silver	. . 380 "		

The gilt proof in my collection is much thinner than the current coin, and is 2 m.m. wider, the edge outside the legend being slightly larger.

There is a corresponding piece in the collection of Dr. H. Peck. It is in bronze, and was previously in the Boyne Collection. *Vide Boyne Sale*, Part I., Lot 1396.

Almost identical with the issue of 1798 is that of 1813, which also consists of pence and halfpence.

1813. PENNY, COPPER.

Obv.—As on the Penny of 1798, except that the rim is not quite so wide, and beneath the truncation of the neck are two annulets divided by a pellet, thus , instead of three pellets; and beneath, on raised rim, the date 1813.

Rev.—As on the Penny of 1798, the rim again being narrower, as on the *obv.* Edge plain. Diameter 34 m.m. [Pl. V. 3.]

HALFPENNY, COPPER.

As on the Penny of same date; the king's name being spelt GEORGIVS. Edge plain. Diameter 28 m.m.

Of the penny and halfpenny there are proofs in copper and bronze, the weights of which are—

PENNY.			HALFPENNY.
Copper	.	312 grs.	156 grs.
Bronze	.	314 „	158 „

There are several specimens in bronze of a mule; the obverse of which is the obverse of the one-pie pattern piece of the Bengal Presidency of 1809 [Pl. V. 4]. The reverse is the reverse of the Georgian Manx halfpenny of 1798. [Pl. V. 2.]

About this period many such combinations or mules were produced at the mint where Thomas Wyon was then at work. As examples we might mention the Irish penny of 1813, the obverse of which is, on one variety, formed of the obverse of the one-stiver piece of Demerara, whilst, on the second variety, the obverse is formed by the obverse of the copper coin for Ceylon of two stivers. There have lately appeared re-strikes of the Manx copper pieces of 1798 and 1813. When the Soho mint ceased to exist, the dies for these coins were sold, and brilliant specimens have of late made their appearance. These may be distinguished by marks of rust from the dies on the field, and also by the rawness of the metal and extreme sharpness of the edge.

After an interval of twenty-six years we come to the last regal coins struck for the island. These are of Victoria, and are dated 1839. The issue consists of the penny, halfpenny, and farthing.

1839. PENNY, COPPER.

Obv.—VICTORIA · DEI · GRATIA · 1839. Head of Queen to left, hair knotted and filleted. W. W. incuse, occurs on the truncation of the neck, in all three pieces.

Rev.—QVOCVNQVE IECERIS STABIT. The Triune feet to left, armoured and spurred. Edge plain. Weight 294 grs., diameter 35 m.m.

[Pl. V. 5.]

The dies were engraved by William Wyon, R.A., and the obverse one exactly corresponds, as do also those of the halfpenny and farthing, with the similar denominations in the English coinage. The rim is beaded.



1



1



2



3



2



5



3



5



5



4



6



8



7

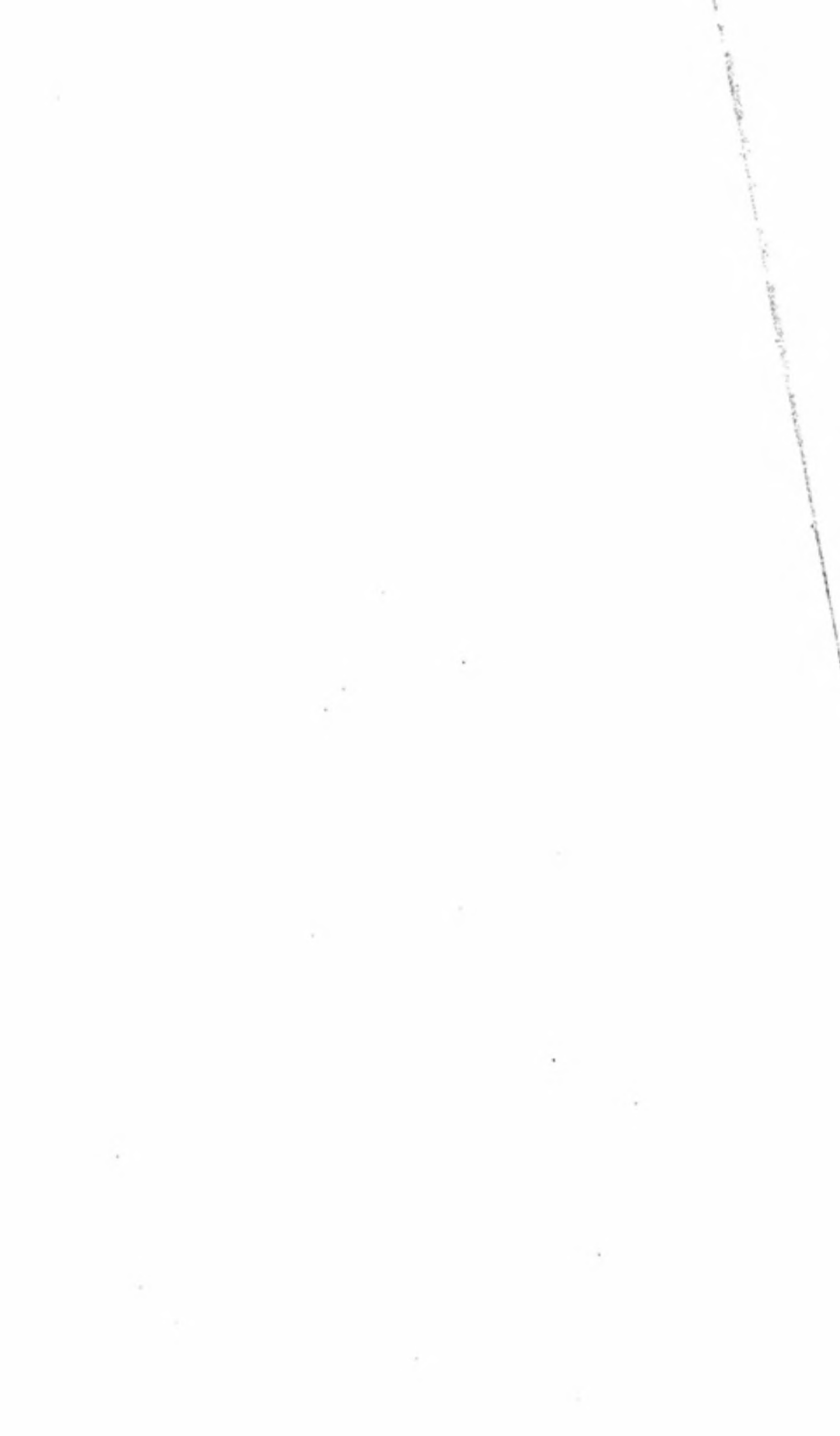


9



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HALFPENNY, COPPER.

Obv.—As on the Penny.

Rev.—As on the Penny. Edge plain. Weight 146 grs., diameter 29 m.m.

FARTHING, COPPER.

Obv.—As on the Penny.

Rev.—As on the Penny. Edge plain. Weight 72 grs., diameter 22 m.m.

There are bronze proofs of all three pieces, and a halfpenny is stated to have been struck in silver.

Some specimens of the halfpenny of 1839 show that the figure 9 has been altered from an 8. The die of the previous year, of the English copper issue, being re-engraved by the mint, to do duty for the island coinage.

The amount of this issue was equal to, of pence £332, of halfpence £446, and of farthings £222; or in other words, 79,680 pence, 214,080 halfpence, and 213,120 farthings, making in all 506,880 copper coins. At this time the population of the island was nearly 50,000; there were thus about 10·5 coins per inhabitant.

In addition to the coins of 1839, specimens are known as follows:—

1841. Penny, Halfpenny, and Farthing.

1859. Penny.

1860. Halfpenny and Farthing.

1864. Farthing.

These pieces, with the exception of the last, are mules, and are formed by using the obverse die of the English copper pieces of corresponding value with the reverse die of the Manx issue of 1839. It is difficult to account for the last-named piece on this ground, as the bronze coinage

was then current in England. However, not having seen these coins, I am not in a position to speak in regard to them. The authorities at the Royal Mint have no knowledge of any of these patterns. From the date of these coins, it is seen that they were, with the exception of the penny of 1841, issued after the insular currency had been withdrawn.

CHAPTER VIII.

INSULAR TOKENS.

IN an earlier part of this monograph was described the token known as Murrey's Penny. It was thought better to mention it with the earlier coinage, as at the time it was the only legalised currency for the island. It was made so by the Act of Tynwald of 1679 (sec p. 49).

Owing, no doubt, to the scarcity of copper coins at the beginning of this century, the issue of tokens again became common in the Isle of Man, just as in England.

These tokens were issued by banks and trading houses in the island, and they consist of pence and halfpence in copper, in addition to which silver tokens were struck by one firm in Douglas.

The first pieces appeared in 1811, of which date there are no fewer than three different varieties.

The first we will describe are those pieces generally known as the Peel Castle Tokens. These excellent coins are of most beautiful and appropriate design, and were published by Messrs. Littler, Dove & Co., bankers, of Douglas. This firm, after a short existence of some three

months, came to an end somewhat suddenly, and their coins were all withdrawn from circulation. This fact, no doubt, accounts for the rarity of these pieces. The issue consists of pence and halfpence, of both of which there are two varieties in copper, and of a crown, half-crown, and shilling in silver.

The silver pieces are as follows :—

CROWN, SILVER.

Obv.—PEEL CASTLE, ISLE OF MAN, within a band, which surrounds a view of Peel Castle from the pier, upon which are two figures standing, one of whom is signalling with his right arm to a vessel which is about to enter the harbour. The rim is toothed.

Rev.—* THE DOUGLAS BANK CO * AT THEIR
BANK DOUGLAS. On a band surrounding the
words, PROMISE TO PAY THE BEARER
ON DEMAND 5 SHILLINGS BRITISH 1811

In seven lines across the field. The rim, as on the *obv.*, is toothed. Edge plain. Weight 284 grs., diameter 36 m.m. [Pl. V. 6.]

HALF-CROWN, SILVER.

Obv.—As on the Crown.

Rev.—As on the Crown, substituting 2s. 6d. for value, in place of 5 SHILLINGS. Edge milled diagonally. Weight 122·5 grs., diameter 30 m.m. [Pl. V. 7.]

In the Shorthouse Sale, 1890, Lot 261, there was a specimen of the half-crown struck in copper. It is no doubt an early proof corresponding closely with the proof shilling described below, also in copper.

SHILLING, SILVER.

Obv.—View of Peel Castle from the sea, with a fishing-smack in the foreground, surrounded by a linear circle and toothed rim ; no legend.

<i>Rev.</i> —DOUGLAS	In five lines across the field, sur-
BANK TOKEN	rounded by same edge as the
ONE SHILLING	<i>obv.</i> Edge engrailed diagonally.
BRITISH	Weight 45 grs., diameter 22
1811	m.m. [Pl. V. 8.]

There is a curious coin, evidently a proof in copper, of this shilling. The description is:—

Obv.—The same as the Shilling.

Rev.—S · ASH, countermarked with an incuse A above : the whole within the usual toothed rim and circle. Edge plain. Weight 71 grs., diameter 22 m.m. [Pl. V. 9.]

Of this mint workman's "freak" there exist some three known specimens, owned by Dr. H. Peck, H. Norman, Esq., and Lieut.-Colonel Leslie Ellis.

1. PENNY, COPPER.

Obv.—View of Peel Castle from the sea, with a fishing-smack in the foreground, surrounded by a band, on which are the words, PEEL CASTLE, ISLE OF MAN. The rim is beaded.

<i>Obv.</i> — DOUGLAS	Within a circle surrounded by
BANK TOKEN	beads. Edge engrailed diagonally.
ONE PENNY	Weight 138 grs., diameter
1811	32 m.m. [Pl. VI. 1.]

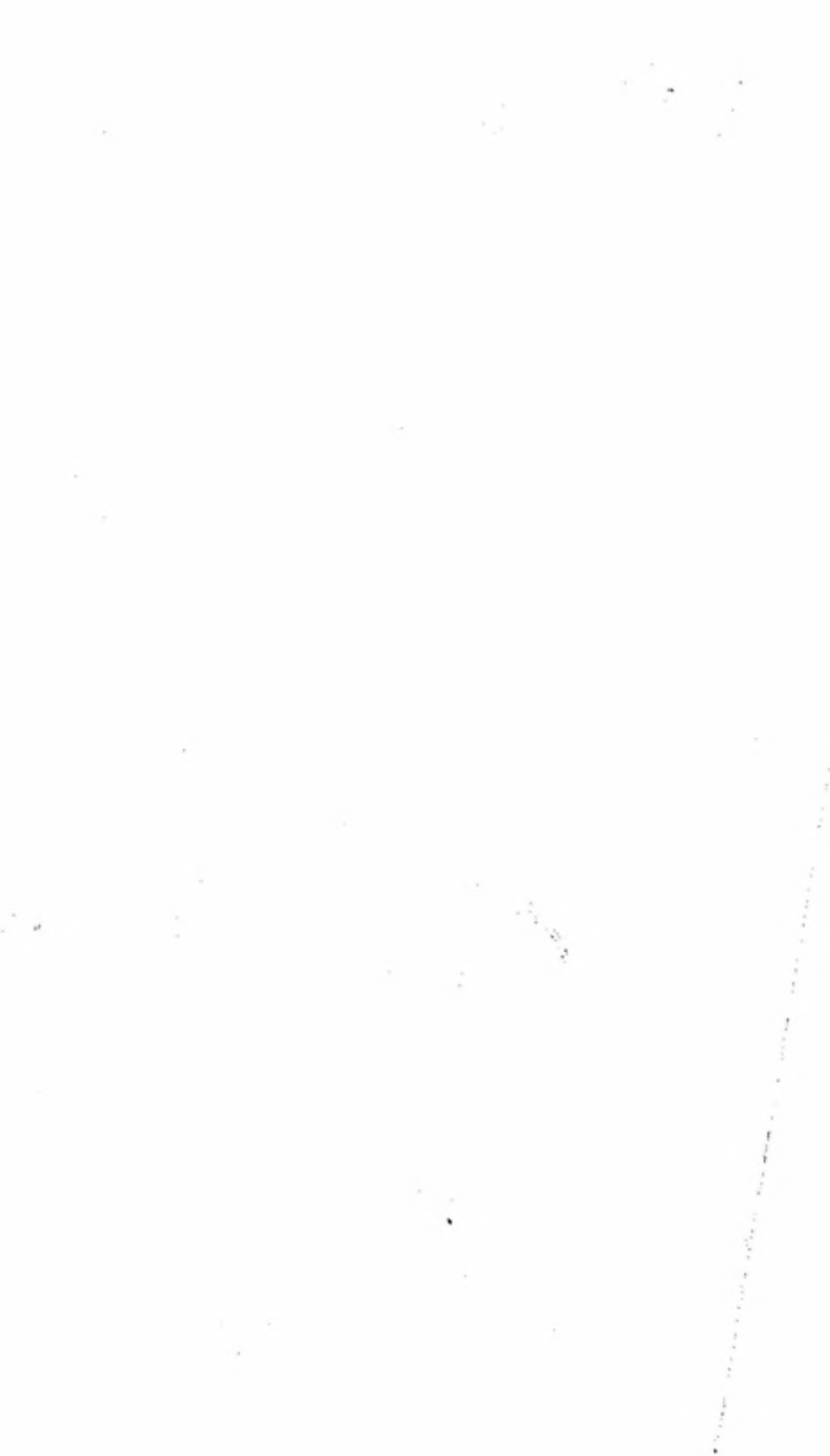
2. PENNY, COPPER.

Obv.—As on the preceding.

<i>Rev.</i> —DOUGLAS	The rim and edge as on the preced-
TOKEN	ing. Weight 192 grs., diameter
ONE PENNY	32 m.m. [Pl. VI. 2.]
1811	



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There is a specimen of No. 1 struck on a very thin piece of metal, which weighs only 98 grains. This piece was probably struck on the halfpenny flan. It is in the collection of S. Haw, Esq., of Liverpool.

1. HALFPENNY, COPPER.

Obv.—As on the Penny.

Rev.— DOUGLAS
BANK TOKEN
HALFPENNY
1811

The rim and edge as on the pennies. Weight 96 grs., diameter 25 m.m.

[Pl. VI. 3.]

2. HALFPENNY, COPPER.

Obv.—As on the preceding.

Rev.—As on the preceding, save that the letters are considerably larger. Rim and edge as before. Weight 98 grs., diameter 25 m.m.

Proofs of these copper pieces are found in bronze.

The following pence and halfpence were issued by Messrs. Quayle, Taubman & Kelly, bankers, of Castletown.

PENNY, COPPER.

Obv.—ISLE OF MAN surrounding the words ^{BANK}
1811 ^{PENNY}

enclosed in a double circle. The extreme rim is surrounded by dots.

Rev.—QVOCVNQUE IECERIS STABIT · The Triune armoured and spurred, feet to right. Rim as on the *obv.* Edge engraved diagonally along the centre. Weight 220 grs., diameter 33 m.m.

[Pl. VI. 4.]

HALFPENNY, COPPER.

Obv.—As on the Penny, substituting HALFPENNY for value.

Rev.—As on the Penny. Edge engrailed as on previous piece. Weight 106 grs., diameter 26 m.m.

The last pieces of this year are those known as the Atlas penny and halfpenny. They were issued by Messrs. Beatson & Copeland, bankers, of Douglas.

PENNY, COPPER.

Obv.—Figure of Atlas, kneeling and supporting the Globe on his shoulders, surrounded by the words, PAYABLE AT THE OFFICE DOUGLAS.

Rev.—MANKS TOKEN ONE PENNY, 1811. The Triune armoured and spurred, feet to left, enclosed in short boots. The rim of both *obv.* and *rev.* is toothed. Edge engrailed diagonally.
Weight 210 grs., diameter 33 m.m.

[Pl. VI. 5.]

HALFPENNY, COPPER.

Obv.—As on the Penny.

Rev.—As on the Penny, the word HALFPENNY taking the place of ONE PENNY. Edge as on the penny. Weight 116 grs., diameter 28 m.m.

PATTERN HALFPENNY, COPPER.

Obv.—Figure of Atlas to the left, supporting larger globe than on the current coin; drapery much heavier, and arranged in different folds, the ground represented by broken lines; legend, PAYABLE · AT · THE · OFFICE · above figure; beneath which, DOUGLAS ·

Rev.—The Triune armoured and spurred, thighs very stout, limbs more acutely flexed than on the ordinary piece. Top toe points to the centre of E in

TOKEN; right foot under the middle of the first N in HALFPENNY; letters in legend much larger and more florid. Edge engrailed diagonally. Weight 110 grs., diameter 27 m.m.



This token is somewhat thicker than the ordinary piece. In the year 1830 there were issued pence and half-pence, of each of which there are two distinct varieties. These were struck for Caine, a baker of Castletown. These pieces are also known as the McTurk and Carter tokens.

1. PENNY, BRASS.

Obv.—GOD : SAVE : THE : KING 1830. Laureate and draped bust of George III to the right, surrounded by toothed rim.

Rev.— FOR Rim as on obverse. Edge plain.
 ⊕ —o— ⊕ Weight 218 grs., diameter 85
 PUBLICK m.m. [Pl. VI. 6.]

—o—
 ACCOMMODATION

2. PENNY, BRASS.

Obv.—GOD : SAVE : THE : KING 1830. Head as on No. 1; rim same.

Rev.— FOR Rim as on No. 1. Edge plain. Weight
 ⊕ —o— ⊕ 200 grs., diameter 85 m.m.
 PUBLICK [Pl. VI. 7.]

—o—
 ACCOMMODATION

1. HALFPENNY, COPPER.

Obv.—As on the Penny No. 2.

Rev.—As on the Penny No. 1. Edge plain. Weight 106 grs., diameter 30 m.m.

2. HALFPENNY, BRASS.

Obv.—As on the Penny No. 2.

Rev.—As on the Penny No. 2. Attention is called to the more elaborate design of the roses. Edge plain. Weight 104 grs., diameter 30 m.m. [Pl. VI. 8.]

The penny and halfpenny numbered 2 appear to me, on account of their superior execution and the finer quality of design, to have been prepared as patterns; only a few of them seem to have found their way into circulation. It appears difficult to account for the presence on these coins of the head of George III, which is evidently a copy of Küchler's head on the English copper coins of 1805. The only suggestion I can offer for the use of this head during the reign of his successor is that, as there had been no regal issue of coins during the reign of George IV for the Isle of Man, a coin bearing an image which had become familiar, owing to the coinages of 1798 and 1813, would, in all probability, become current more readily than one upon which was a comparatively unknown head. This, as the issue was a private venture, was of primary importance.

The reverse of the halfpenny of the more elaborate design also occurs as the reverse of a Canadian halfpenny of 1815.

HALFPENNY, BRASS.

Obv.—Full-rigged ship to left; around, the legend SHIPS COLONIES AND COMMERCE 1815.

Rev.—As on the Manx halfpenny. Edge plain. Weight 76 grs., diameter 28 m.m. The L in PUBLICK is, as on the Manx piece, weakly struck.

During the year, 1831, William Callister of Ramsey struck the last token for insular use, if we leave out of consideration the numerous jettons, to be presently described.

HALFPENNY, COPPER.

Obv.—PRO BONO PUBLICO 1831, incuse, on raised rim, surrounding the words, HALF PENNY TOKEN, in three lines.

Rev.—QUOCUNQUE · IECERIS · STABIT, incuse on raised rim, as on the *obv.*, enclosing the Triune armoured and spurred, feet to right. Edge plain. Weight 126 grs., diameter 29 m.m.
[Pl. VI. 9.]

Beneath is the description of a remarkable Manx token for four shillings, undated. This is struck in copper, and was found in 1892, at Ballaugh, near Ramsey.

Obv.—Head of king, with legend in Manx, HIARE SKILLIN PEESH.

Rev.—St. George and the Dragon.

The translation of the legend on the obverse is: Four Shilling piece.

Fourteen Manx pence were equivalent to one shilling British, until 21st September, 1840, when the currency was made equal to the English, viz., twelve pence to the shilling; this change gave occasion to serious rioting.

Another token is found in brass, of very rude execution; it is of the halfpenny size.

Obv.—A man walking beside a horse; legend undecipherable.

Rev.—Triune; legend in same condition as on *obv.*

CHAPTER IX.

MANX JETTONS.

THE last pieces to be described relating to the island are a series of checks or jettons, all of which are struck in brass. Those bearing the names of hotels were given, as I am informed, to the winners at bagatelle, to be exchanged at the bar. These checks, consequently, scarcely come within the confines of this work, and are only shortly described.

No. 1. TWOPENCE, BRASS.

Obv.—GALLIMORE'S SHEFFIELD HOTEL, and
within circle,

DOUGLAS

2D

ISLE OF MAN

Rev.—Blank. Edge engrailed. Weight 90 grs., diameter
25 m.m.

No. 2. TWOPENCE, BRASS.

Obv.—BROWN'S THEATRE ROYAL HOTEL, and
within circle,


DOUGLAS

2D

ISLE OF MAN

Rev.—Blank. Edge engrailed. Weight 90 grs., diameter
25 m.m.

No. 3. TWOPENCE, BRASS.

Obv.— J. W. BIRTLESS  PIER INN, and within circle,

DOUGLAS
2D
ISLE OF MAN

Rev.—Blank. Edge plain. Weight 80 grs., diameter 25 m.m.

No. 4. TWOPENCE, BRASS.

Obv.—Within beaded circle,

TRUSTRUM
YORK
HOTEL
DOUGLAS
I. PARK 64. CABLE ST LIVERPOOL

Rev.—Within beaded circle, 2D. Edge engrailed. Weight 106 grs., diameter 26 m.m.

No. 5. TWOPENCE, BRASS.

Obv.— RAILWAY HOTEL  DOUGLAS ; within plain circle, COWARD & CO L'POOL.

Rev.—2 D. Edge engrailed. Weight 85 grs., diameter 26 m.m.

There are also two tokens, the value of which is not expressed. They were both issued by a Mr. Falkner, a draper in Douglas.

1. BRASS.

Obv.—FALKNER'S

—O—
BAZAAR

—O—
ATHOLL ST DOUGLAS

Rev.—The Triune armoured, feet to right, within circle, and the legend, QUOCUNQUE JECERIS STABIT.
Edge plain. Weight 30 grs., diameter 20 m.m.

2. BRASS.

Obv.—Head of Queen to left, filleted, within beaded circle; legend behind head, VICTORIA.

Rev.—The Triune armoured, feet to left, within circle, and the motto, DOUGLAS BAZAAR AUGUST 1857, within a beaded circle. Edge guilloche. Weight 40 grs., diameter 17 m.m.

The Triune on this coin is an exact reproduction of that on the Georgian pieces of 1798 and 1813. This piece is not infrequently found silvered.

The Manx coinage was withdrawn from circulation on July 13th, 1842, and amounted to £59 19s.

The Manx people were at times so short of small change that buttons bearing the Triune, from which the shanks had been removed, passed as coins.

CHAPTER X.

SEVENTEENTH-CENTURY TOKENS IN RELATION TO THE
ISLE OF MAN.

THE tokens we shall first describe are those bearing the Triune. Of these there are three: the first is a farthing of Norwich, dated 1657; the second is a farthing of London without a date; the third, also of London, is undated.

1. NORWICH TOKEN, FARTHING, COPPER.

Obv.—IOHN ♦ HVFTON ♦ m.m. mullet. Surrounding the Triune armoured and spurred, feet to right.

Rev.—♦ H ♦ within dotted circle surrounded by IN ♦
I * E
NORWICH · 1657; m.m. mullet.

2. LONDON TOKEN, FARTHING, BRASS.

Obv.—The Triune within IO · IAKEMAN · YARNE ·
SELLER.

Rev.—ON · LITTLE · TOWER · HILL, enclosing
I · K · I ·

3. LONDON TOKEN, HALFPENNY, BRASS.

Obv.—WILLIAM · WIGFALL, surrounding HIS · HALF
· PENNY.

Rev.—The Triune in centre, enclosed by the words, IN
SOVTHWARKE.

The next tokens are those of a series bearing the crest of the Eagle and Child, the well-known badge of the Stanley family. This appears to have been a very favourite sign for the inns of the period, and is most frequently met with on the tokens of London and Lancashire, although they occur elsewhere, though rarely. The earliest specimen is a leaden token, anterior to 1649, in the Beaufoy Cabinet.

4. LONDON TOKEN, FARTHING, LEAD.

Obv.—Eagle and Child.

Rev.—T · K · G.

There are several undated specimens, which probably preceded the dated tokens, and may be described as follows :—

5. LONDON TOKEN, HALFPENNY, COPPER.

Obv.—ROBERT · LEE · AT · Y^s · IN · WICH, surrounding the Eagle and Child.

Rev.—STREET · AGAINST · NEW · INN ·, enclosing the words, HIS · HALFE · PENNY.

6. LONDON TOKEN, FARTHING, BRASS.

Obv.—Eagle and Child.*Rev.*—IN TVTTLE STREET; in the field, ROGER
COOKE CHANLER.

7. LONDON TOKEN, HALFPENNY, COPPER.

Obv.—Eagle and Child surrounded by IAMES · LA-
THAM · AT · THE ·*Rev.*—HIS HALFE PENNY I · M · L; within,
AGAINST · Y^E · MIDDLE · ROW · HOLBORN.

8. DEDDINGTON TOKEN (OXFORD), FARTHING, BRASS.

Obv.—Eagle and Child; within, ANN · MAKEPACE ·
IN ·*Rev.*—DADINGTON · MERCER, enclosing A · M ·

We now come to the dated tokens bearing the Eagle and Child.

9. ROCHDALE TOKENS (LANCASHIRE), FARTHING, BRASS.

Obv.—IAMES · HAMAR · OF ·; within which the Eagle
and Child.*Rev.*—RATCHDALE 1665, with I · H · in centre.

10. LONDON TOKEN, FARTHING, COPPER.

Obv.—HENRY · STONE · IN ·, surrounding the Eagle
and Child.*Rev.*—THE · MINORIES 1656, within the letters
H · S · S ·

11. LONDON TOKEN, FARTHING, BRASS.

Obv.—YE · EAGLE · & · CHILD · IN ; within, the Eagle
and Child.*Rev.*—S^T · GILES · Y^E · FIELDS · [16]57, surrounding
I · B · L ·

12. DEAL TOKEN (KENT), FARTHING, COPPER.

Obv.—WILLIAM · COVLSON, surrounding the Eagle and Child.

Rev.—IN · DEAL · 1659 ; within which, W · I · C ·.

13. SOUTHWARK TOKEN, HALFPENNY, COPPER.

Obv.—TIMOTHEY · PHELPS · AT · THE ; surrounding the Eagle and Child.

Rev.—IN · ST · TOOLIS · STREET · 1665, enclosing HIS HALF PENY.

14. BARFORD TOKEN (OXFORD), FARTHING, COPPER.

Obv.—IOHN · KNIGHT, surrounding the Eagle and Child.

Rev.—IN · BVRFORD 1666, enclosing I · S · K ·.

15. HOLLAND TOKEN (LANCASHIRE), HALFPENNY, BRASS.

Obv.—WILLIAM · IACKSON · OF · 1667, surrounding the Eagle and Child.

Rev.—HOLLAND · HIS · HALF · PENY ; within, W · I ·.

16. LONDON TOKEN, FARTHING, COPPER.

Obv.—THOMAS · SANDON · AT · Y^E ·, surrounding the Eagle and Child.

Rev.—IN · THE · MINORIES · 1667, enclosing T · M · S ·.

17. LONDON TOKEN, HALFPENNY, BRASS.

Obv.—ROBERT · DANCE · IN · STRVTON ; within, the Eagle and Child.

Rev.—GROVND · WESTMINSTER · [16]67, enclosing, HIS HALFE PENNY R · S · D ·.

18. LANCASTER TOKEN, HALFPENNY, COPPER.

Obv.—WILLIAM · PROCKTER; within, the Eagle and Child.

Rev.—IN · LANCASTER · 1670, enclosing, W · E · P ·

19. LANCASTER TOKEN, PENNY, COPPER.

Obv.—WILLIAM · PROCKTER, surrounding the Eagle and Child.

Rev.—IN · LANCASTER · 1671 ; within, W · E · P ·
ID.

20. EAST DEREHAM TOKEN (NORFOLK), FARTHING, BRASS.

Obv.—JOHN · MARSHALL · OF · ; within, the Eagle and Child.

Rev.—EAST · DEARHAM · [16]71, surrounding I · E · M ·

With this description of the seventeenth-century tokens relating to the Isle of Man we will close the account of the brief but interesting currency of the Island.

PHILIP NELSON, M.B.

MISCELLANEA.

NOTE ON MR. G. F. HILL'S THEORY REGARDING THE DEFACEMENT OF ROMAN AUREI FROM PUDUKOTA.—In the *Numismatic Chronicle* for 1898, pp. 804—820, Mr. G. F. Hill describes a hoard of Roman aurei, 501 in number, of which no less than 461 have been defaced by a chisel cut, which Mr. Hill considers to have been impressed on them by the Mint authorities, as a preliminary to consigning them to the melting-pot. Now if the Mint authorities had condemned these defaced coins to the melting-pot on their merits, or perhaps I should say *demerits*, what need was there to be at the trouble of defacing them? And how came the two classes of coins, after the light ones had been separated, to be mixed again in the same hoard? There is a very suspicious silence, moreover, in Mr. Hill's paper as to the respective weights of the defaced and undefaced coins, for had all the defaced coins been light, and the undefaced ones been all of full weight, Mr. Hill's contention would have received some support from such a fact. A far simpler explanation, and one, moreover, fully borne out by modern experience, is that the defaced coins had simply passed at some time through the hands of a fanatical Muhammedan, holding the views of Mahmud of Ghazni, who declared he wished to be known as the "breaker" of idols, not as the "seller" of them. Such a man finding a gold coin with a *head* or *image* on it would, before selling it, deface it by a chisel cut, and so evade the reproach of selling "idols." If this is the case, it sufficiently explains why the coins dug out of "topes" are not defaced, to which fact Mr. Hill alludes, as they were buried before the Muhammedan era. In Northern India I have seen many beautiful Greek staters of full weight, and almost Mint condition, with a deep and viciously inflicted gash across the neck, and I consider there is no reasonable doubt that to religious fanaticism we owe the defacement of these aurei, rather than to the action of native Mint officials, jealous of the standard either as regards "weight" or "finess" of the coins in question. Are any gold coins, similarly defaced, known, save such as have an "image" on them?

W. THEOBALD.

THE suggestion as to the cause of the defacement of the aurei in the Pudukota find was, I remember, made by others when the coins were first brought to the British Museum. I have passed it over for the following reasons. Although most of the coins are much worn, I should suppose that they would be in still worse condition had they circulated after the second century A.D. Indeed, I am inclined to withdraw the words "as being too much worn for further circulation," and to suggest that the ruler who had them defaced objected to these coins, with the symbol of Roman sovereignty, circulating in his dominions. Secondly, the cuts are confined to the *heads*: the figures, seated or standing, have, without exception, escaped. Yet these figures bear much greater resemblance to idols than the heads alone. Thirdly, the fanatic in question would hardly have spared the head of Agrippina while defacing the head of Nero on the *same side* of the coins described in No. 58. On the other hand, the defacement of one head is sufficient to serve the political object I have supposed to be in view. On No. 59 the defacer has followed a counsel of perfection. Fourthly, the cuts are by no means savage, but most deliberate. It may be noted that they all extend vertically from the crown of the head downwards. None are on the neck. Those coins which have escaped did not, I suppose, pass through the same hands as the rest, but were afterwards placed in the same hoard.

G. F. HILL.

NUMISMATIC PRIZE.—It is announced in the *Revue Belge de Numismatique* that M. Alphonse de Witte will offer in October next a prize in competition for a treatise on Roman coins or medallions, either of the Republican or Imperial times, or of Roman Colonies. The prize will be either in money, 300 francs, or a complete set of the *Revue Belge de Numismatique*.

The paper or treatise should be in French, and may be accompanied with illustrations. It must consist of sixteen pages, at least, of letter-press, and should be addressed to M. Alphonse de Witte, 49, rue du Trône, Brussels, before the 1st of October, 1899.

The merit of such contributions will be determined by a jury consisting of—

M. le Major Max Bahrfeldt, director of the *Numismatischer Literatur-Blatt*, Breslau (Silesia).

M. J. Adrien Blanchet, "bibliothécaire honoraire" of the Bibliothèque Nationale, Paris, and secretary of the *Revue de Numismatique*.

M. Francesco Gneecchi, director of the *Revista Italiana di Numismatica*, Milan.

The directorate of the *Revue* reserves the right of publishing any of the memoirs which shall be submitted to the jury, or to return them to the authors. In case of publication the authors will receive as compensation fifty short copies.

M. Le Vicomte de Jonghe, President of the "*Société Royale de Numismatique*," proposes to institute a similar prize for an article on Greek numismatics.

H. G.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

War Medals and Decorations issued to the British Military and Naval Forces from 1588 to 1898. By D. Hastings Irwin. 2nd ed. London: L. Upcott Gill. 1899.

The first edition of this work on War Medals and Decorations appeared in 1890, and the fast-increasing interest in such objects has procured for it such a speedy sale that a new edition has been needed to meet the public demand. The work has been brought up to date, and the frequent award of medals of recent years has alone occasioned many additions. The author does not confine his descriptions to military medals, pure and simple—that is, those issued either by order of the Government, or by such a controlling power as the East India Company—but he also includes regimental medals, those awarded to the Militia, Yeomanry, and Volunteers, the various British orders, foreign orders granted to British soldiers, life-saving medals, and others of a semi-military character. It thus includes medals and decorations of all classes which have at various times been awarded to the British Army and Navy. Though the presenting of such medals may be dated back to the reign of Queen Elizabeth, yet the practice did not become general till quite recent times; in fact it may be said not to have been established till 1847, in which year the two medals known as the General Military Service medal and the General Naval Service medal were issued. These, however, referred to events mostly long past. The former was given for actions which had occurred between 1806 and 1814; the latter for actions extending from 1793 to 1840. Previous to that date, however, we have a large series of medals issued under the auspices of the East India Company, which began about 1784;

and also those issued by the officers of regiments to non-commissioned officers and privates under their command. In fact for some time this latter series took the place which should have been filled by an award issued by authority. Previous to the present century the medals awarded were either to single individuals or for particular engagements. Of the latter may be instanced the Armada medals given by Queen Elizabeth; the Dunbar and Blake medals, granted by the Commonwealth; the La Hogue medal, the Culloden medal, and lastly, the Waterloo medal, which, however, brings us into the present century. Throughout this period are dotted here and there medals given on special occasions to particular individuals. Since 1847, however, the practice of giving medals to the Army and Navy has become general, and no soldier or sailor who has successfully served in any campaign or war goes unrewarded in this respect. This series of medals has not only become very extensive, but it is also historically interesting, as it serves as a record of the deeds of the British Army and Navy.

Besides these general medals there are others of a special character, such as the Victoria Cross, the most coveted of all, since the recipients must have performed some special act of valour; the Distinguished Conduct medal, that for Conspicuous Gallantry, that for Meritorious Service; and others for Long Service, Good Conduct, &c.

In dealing with his subject Mr. Irwin has had rather a wide field to cover, and in consequence, in order to bring his book within the limits of a collector's manual, he has been compelled to curtail as much as possible historical details. Yet he has succeeded in identifying each medal with the event which led to its issue, and in many instances he has supplied lists of the regiments which served in the various engagements. In the case of the Victoria Cross in particular, he gives a complete list of its recipients, with the dates of the awards. This information is very useful to a collector, who is thus able to detect any false grouping of bars, or the falsification of recipients' names, such practices being now very prevalent.

The work is illustrated with thirteen plates and numerous facsimiles and woodcuts. Owing, however, to their want of uniformity in character they rather detract from the general good effect of the work. The photographic plates could certainly be improved on, and one kind of process-block would have been more pleasing to the eye. The work, however, is very complete, and, so far as we can see, accurate in its details; and with these two good qualities it will certainly continue to find favour with collectors.

H. G.

V.

GREEK COINS ACQUIRED BY THE BRITISH MUSEUM IN 1898.

(See Plates VII, VIII, IX.)

THE number of Greek coins acquired by the British Museum during the year 1898 is 924, a total larger than that recorded for any of the last eleven years. The many rare and costly pieces procured by the Museum in 1896 and 1897 were chiefly purchases at the Montagu and Bunbury sales, that were made out of a special Treasury Grant. The coins purchased in 1898 have been bought out of the ordinary Departmental Grant, and though the bulk of them are in bronze and of a late period of art, they include a large number of scarce and interesting specimens. Presentations of coins are due to the kindness of Mr. H. F. Amedroz, Captain Balfour, Sir John Evans, Lord Grantley, Mr. Barclay V. Head, Mr. A. J. Lawson, Mr. J. R. Van Millingen, Mr. E. J. Seltman, and Sir Hermann Weber.¹

¹ Important Greek acquisitions of the Department of Coins and Medals from the year 1887 onwards will be found described by me in the *Numismatic Chronicle* for 1888, p. 1 f.; 1889, p. 249 f.; 1890, p. 311 f.; 1891, p. 116 f.; 1892, p. 1 f.; 1893, p. 1 f.; 1894, p. 1 f.; 1895, p. 89 f.; 1896, p. 85 f.; 1897, p. 93 f.; 1898, p. 97 f. In preparing this paper I have had the advantage of consulting the section on Greek coins

GREEK COINS ACQUIRED 1887—1898.

Year.	Gold and Electrum.	Silver.	Bronze, &c.	Total.
1887	8	58	110	176
1888	10	217	228	455
1889	12	65	270	347
1890	5	102	70	177
1891	16	280	73	369
1892	10	99	348	457
1893	4	118	281	403
1894	31	164	453	648
1895	20	178	479	677
1896	54	428	170	652
1897	20	313	503	836
1898	3	222	699	924
Total. .	193	2,244	3,684	6,121

TARENTUM.

1. *Obv.*—**TAPA** Head of Demeter r., wearing necklace, earring, diaphanous veil, and ornamented stephane; behind, E; in front, dolphin; border of dots.

Rev.—**TAPANTINΩN** Poseidon, wearing himation over lower limbs, seated l., and bending towards the boy Taras, who stands before him, wearing crepundia, with hands raised in supplication; beneath seat, K; in field r., star and † . . ; on lower edge of coin, Z (?).

N. Size .7. Wt. 192.5 grs. [Pl. VII. 5.]

The acquisition of this rare and interesting coin fills an important lacuna in the Tarentine series in the British Museum. The Ashburnham example, which came into

written by Mr. Barclay Head for the Parliamentary Report of the British Museum, and I also owe several valuable suggestions to my colleague Mr. G. F. Hill.

the market a few years ago, realised the large sum of £175, and was not secured by the Museum.² The specimen now obtained—from an Italian source—is apparently from the same dies as the fine coin in the Berlin Museum (Dressel, *Beschreibung*, III., 1, p. 224, No. 1, Pl. X. 147), and is, like it, in an admirable state of preservation; indeed, if we except a trifling abrasion on the obverse, it has all the brilliancy of freshly minted money.

It is to be regretted that the reverse die of our specimen has moved out of position, and that some details have thus become blurred. But the general effect of the composition and the beautiful modelling of the figure of the god have not been materially impaired.

This magnificent coin has been rightly placed at the head of the gold coinage of Tarentum—a coinage which originated in the latter half of the fourth century B.C.³ At that period the Tarentines, being hard pressed by the Messapians and Lucanians, turned for aid abroad, and large disbursements doubtless became necessary for the payment of mercenary troops. In B.C. 344 an alliance was concluded with Sparta, and shortly before 338 King Archidamos landed with troops. Four years later, a new ally, Alexander, King of Epirus, brought substantial aid to the Tarentines (B.C. 334).

Mr. Arthur Evans supposes that our coin was struck circ. B.C. 340, and that its remarkable reverse alludes to the appeal of Tarentum (the child Taras) to its Spartan fatherland, typified by Poseidon. This ingenious explanation is hardly susceptible of proof, but it has the merit of accounting for the appearance of a novel type on Taren-

² Ashburnham Sale Cat., 1895, lot 8 (without inscriptions, &c.).

³ Arthur J. Evans, *Horsemen of Tarentum*, p. 64 ff.

tine money. If, however, we hesitate to recognise this historical allusion, it may perhaps be necessary to refer this coin and the first beginnings of Tarentine gold coinage to the time of Alexander of Epirus (B.C. 334).

Alexander's arrival (as Mr. Evans has shown) had considerable influence on the Græco-Italian coinages, and a comparison of our coin with the fine gold stater of Alexander (Head, *Coins of the Ancients*, Pl. XXXIII. 11; *obv.* Head of Zeus, *rev.* Fulmen), which was struck in Italy and probably at Tarentum, reveals some remarkable resemblances, especially in the treatment of the hair and in the expression of the Poseidon, who has the mild aspect of the Zeus. Mr. Evans⁴ has already assigned to the time of Alexander (B.C. 334-330) gold coins which are—as regards the obverse head—identical with our Poseidon and Taras coin.

SARIS, SCYTHIAN DYNAST?

2. *Obv.*—Male head r., wreathed?

Rev.—**ΒΑΣΙ** Bow in case.
ΣΑΠΙ

Æ. Size .65. [Pl. IX. 1.]

This dynast is known only from his coins, among which are the following (cp. Pick, *Ant. M. Nord-Griechenlands*, I. pl. xiii):—

- i. Head of Demeter r. *Rev.*—Two ears of corn. (Cadavène, *Recueil*, p. 85, fig. 1 (after Froehlich) = Mion., *Sup.* iii., p. 355, No. 1.)
- ii. Head of Apollo r. *Rev.*—Ear of corn and torch. (Koehne, *Mus. Kotschoubey*, i., p. 26; *Berl. Blätter*, ii., 135.)
- iii. Male head r. *Rev.*—Bow in case (as No. 2 above). (Cadavène, *op. cit.*, p. 85, fig. 2 (after Froehlich) = Mion., *Sup.* iii., p. 356, No. 2.)

⁴ *Op. cit.*, Pl. V. 3, 4.

The reverse type of our coin is of course a bow in its case, and not a quiver, as it has sometimes been called. The obverse head is called by Cadalvènc a diademed Herakles: by Koehne, a diademed Zeus. On this specimen it is in poor preservation. It is probably a divinity's head—as on the other coins (i. and ii.)—and not the king's own portrait. In general appearance it rather recalls the river-god on the coins of Olbia (*rev.* bow in case and axe⁵), but Zeus or some other god may be intended.

Mionnet classified these coins under the "Kings of Illyria," but this attribution is not in accordance with what is known of their provenance.⁶ Froehlich's coins (Nos. i. and iii.) were found in 1825 in the neighbourhood of *Adrianople*. No. ii. was found in the island of Fidonisi, opposite Olbia. Our new coin was brought to England together with a large number of Thracian and Moesian coins (chiefly imperial), which were procured on the Black Sea coast. It can hardly be older than the second or first century *b.c.*⁷, and probably belongs to some Scythian dynast who had a mint on the eastern shores of the Euxine, perhaps near Olbia or Odessus.⁸ Some types of Sarias recall the types of Tomi.

Βασιλεύς ΑΙΑΙΟΣ.

3. *Obv.*—Head of Helios facing, radiate.

Rev.—ΒΑΣ[ΙΛΕΥ] Two stars placed one above the other ;
ΑΙΑΙΟΣ beneath, ☉.

Æ. Size .7. [Pl. IX. 2.]

⁵ *E.g.* Von Sallet, *Beschreibung*, i., Pl. II. 19.

⁶ Cp. Von Sallet, *op. cit.*, i., p. 340.

⁷ Cp. Imhoof-Blumer, *Porträtköpfe*, p. 20.

⁸ Cp. Von Sallet, *op. cit.*, i., p. 340.

This coin was brought to England among the Thracian, &c., pieces referred to in the last section. Its genuineness is indubitable. It is from the same dies, or at any rate is practically identical with, the coin of a supposed Scythian dynast, "Heles" or "Helios."

This last-named coin was found in the island of Fidonisi, opposite Olbia, and was published in 1852 by M. Mursakewitsch. The publication was repeated by Koehne⁹ with an obviously faulty engraving. Von Sallet,¹⁰ not unreasonably, but, as it turns out, not on good grounds, suspected the coin to be a fabrication. It is now in the Odessa Museum, and has been re-published by M. Oreschnikow, with a photograph.¹¹

Oreschnikow reads (as Koehne read) ΒΑΣΙΛΕ ΗΛΙΟΣ, but a comparison of his photograph with our new specimen clearly shows that, in the second word, there is an Ι before the Λ as well as after it. Moreover, the first letter as established by our coin is undoubtedly not Η but Α. We are thus confronted with the reading ΒΑΣΙΛΕ(ὺς) ΑΙΛΙΟΣ. That such a name as Aelius should be borne by a local dynast, and, apparently, as early as the first or second century B.C., certainly seems curious. Possibly, Βασιλεύς is here merely the title of a religious or civic functionary, such as is found in the inscriptions of Olbia, Calchedon, Byzantium, and other cities.¹²

⁹ *Berliner Blätter*, ii., p. 136, Pl. XV. 3; *Mus. Kotschoubey*, i., p. 26.

¹⁰ *Zeit. für Num.*, ix., 156 f.

¹¹ A. Oreschnikow, *Contributions to the Ancient Numismatics of the Coasts of the Black Sea* (Moscow, 1892), p. 29 ff.; Pl. II. 25. (In Russian, with brief summary of contents in German.)

¹² Cp. Sallet, *Z. f. N.*, ix., 145; Pick, *Num. Zeit.*, xxvii., 41, &c. Mr. G. F. Hill suggests ΒΑΣΙΛΕ(ως) ΑΙΛΙΟΣ, treating ΑΙΛΙΟΣ as the genitive of a name ΑΙΛΙΣ.

Oreschnikow supposes that the coin was struck at Tomi, the name of which he finds in the monogram of the reverse. The type of two stars (side by side, however) occurs on pre-imperial money of Tomi,¹³ and there probably relates to the Dioskuri. The Tomitan coin is (like our "Aelios" coins) apparently of the second or first century B.C., and has (also like our coin) bevelled edges. The head of Helios is not, I believe, found on coins of Tomi. It occurs on pre-imperial coins of Olbia.¹⁴

ALUS OR HALUS (THESSALY).

4. *Obv.*—Head of Zeus Laphystios l., bare; in front, thunderbolt; border of dots.

Rev.—ΑΛΕ Ω Ν Helle, wearing chiton, seated sideways on ram r.; r. hand on ram's back; l. hand grasps ram's horn; circular incuse.

Æ. Size .6. [Pl. VII. 1.]

Fourth century B.C. Similar to a poorly preserved coin described (p. 13, No. 1) and engraved (Pl. XXXI. 1) in *Brit. Mus. Cat., Thessaly*, but the latter is struck on a much thicker flan.

CIERIUM (THESSALY).

5. *Obv.*—Bearded head l. (Poseidon).

Rev.—ΚΙΕΡ Νymph Arne, kneeling on r. knee, looking l., and with r. hand playing with astragali.

Æ. Size .55. [Pl. VII. 3.]

¹³ Oreschnikow, *op. cit.*, Pl. II. 26; *Brit. Mus. Cat., Tauric Chersonese*, p. 54, No. 3.

¹⁴ Von Sallet, *Beschreibung*, i., p. 25, No. 114; Oreschnikow, *op. cit.*, Pl. II. 27.

Fourth century B.C. Cp. Millingen, *Ancient Greek Coins*, Pl. III. 13; Bompais, *Cicrium* (Paris, 1876), fig. 5; Head, *Hist. Num.*, p. 249; Imhoof-Blumer, *Z. f. N.*, vii. 12 f.

HOMOLIUM (THESSALY).

6. *Obv.*—Bearded male head r., in pilidion; hair long.

Rev.—**OMOI KON** Serpent coiled r.¹⁵

Æ. Size .7. [Pl. VII. 2.]

The usual legend is **OMOIÆΩN** (cp. Schlosser, *Beschreibung* (Vienna Coll.), p. 10, No. 1; Pl. I. 10).

MAONETES (THESSALY).

7. *Obv.*—Head of Artemis l.; hair tied in bunch behind; quiver at shoulder; border of dots.

Rev.—**ΜΑΓΝΗΤΩΝ** Poseidon, naked, standing l.; in r., dolphin; l. hand on trident; in front, branch. (B.C. 197—146.)

Æ. Size .65. [Pl. IX. 3.]

EUBOEA.

8. *Obv.*—Bull recumbent l.; beneath, **ΞΕ**; above, star; border of dots.

Rev.—**ΕΥ ΒΟ ΕΩΝ** Vine-branch with two bunches of grapes; above, star.

Æ. Size .85. [Pl. VII. 4.]

B.C. 196-146. Cp. the nearly similar coins of smaller module in *Brit. Mus. Cat., Central Greece*, p. 98, No. 34 ff.

¹⁵ Cf. Muret in *B. C. H.*, v. 290.



1 Æ



2 Æ



3 Æ



4 Æ



5 A



4 Æ



6 A



6 A



8 A



7 A



7 A



ATHENS.

9. *Obv.*—Head of Athena Parthenos r., wearing ornamented helmet and earring; border of dots.

Rev.— A ΘΕ Owl standing on amphora in-
 EVBO YAI scribed B; in field r., archaic
 ΔΗΣ Artemis, draped, standing fac-
 ΑΓΑ ing; in r., patera; in l., bow;
 ΛΣ beside her, doe looking up;
 whole in olive wreath.

R. Size 7. Wt. 68.5 grs. [Pl. VII. 8.]

The drachm is, I believe, unpublished in the Eubou-
 lides-Agathocles series.¹⁶ The third name ΛΣΙΠ(πος)
 is already known.¹⁷

GORTYNA (CRETE).

10. *Obv.*—Head of Athena r., in helmet; in front, B; border of dots.

Rev.—ΓΟ P Owl facing on amphora; in field r.,
 TY NI bull butting r.; whole in olive
 ME ΩN wreath.
 N
 A N

R. Size 1.15. Wt. 229.2 grs. [Pl. VII. 6.]

A variety of the specimens published in Svoronos, *Crète*, Nos. 181-186. A specimen in the French Collec-
 tion (Svoronos, No. 184) reads at greater length ME NA
 N TI, in which, as there seems to be no Greek name
 beginning Μεναντι, two names must be recognised, *e.g.*,
 Μέν[ων?] and Ἀντί[μαχος?]. Two names are found

¹⁶ Beulé, p. 287; Head, *Brit. Mus. Cat., Attica*, p. 53;
 p. xlii.; Preuner in *Zeit. für Num.*, xxi. (1898), p. 81.

¹⁷ Beulé, p. 287.

on the similar "Athenian" tetradrachms of Priansus, and also, apparently, at Hierapytna.

It is hardly possible to determine whether the names represent two distinct magistrates, or whether (as in the case of the coin of Priansus described *infra*, No. 12) there is only one magistrate, with his patronymic (*e.g.* Μένων Ἀντίμαχου).

POLYRHENIUM (CRETE).

11. *Obv.*—Head of Athena r. in helmet; border of dots.

Rev.— Π Ο Owl, facing, on amphora; in field
ΛΡΡ ΗΝΙ r., Artemis shooting with bow
ΩΝ r.; in field l., two pilei sur-
mounted with stars; whole in
olive wreath.

℞. Size 1.1. Wt. 247.6 grs.

The symbol in the left of the field is probably the signet of a magistrate, the Artemis being the symbol or mint-mark of the city. (Cp. *Z. f. N.* xxi. 322.)

PRIANSUS (CRETE).

12. *Obv.*—Head of Athena r., helmeted.

Rev.— ΠΡ Ι Owl, facing, on amphora; in field r.,
ΑΝ ΣΙ palm-tree; whole in olive wreath.
ΕΞΑ ΚΕ
ΣΤ ΑΣ
ΣΩ ΔΑ
Μ Ω

℞. Size 1.2. Wt. 248.8 grs. [Pl. VII. 7.]

The names are unpublished—"Exakestes, son of Sodamos." An epigram on a Cretan fisherman named Sodamos occurs in the *Anthology*, vii. 494 (Σώδαμος ὁ Κρήης).

PAROS.

13. *Obv.*—ΠΑ Goat l., looking back, with l. foreleg bent.

Rev.—Two goats' heads, facing one another, butting; beneath, bunch of grapes or rosette (?); whole in circular incuse.

Æ. Size 4. Wt. 18 grs. [Pl. VIII. 1.]

The character of the types rather suggests that this coin belongs to the earlier part of the fifth century. Two goats' heads (not, however, butting,) are found on the small coins of Delphi, which are dated by Head "before B.C. 421,"¹⁸ and by Svoronos,¹⁹ "B.C. 520-500." The object beneath the heads here seems to be partly off the flan.

The letters ΠΑ in conjunction with the goat on the obverse are important, as showing that the very early uninscribed staters from the Santorin find, &c., with a similar goat,²⁰ are rightly assigned to Paros.

NEOCLAUDIOPOLIS (PAPHLAGONIA).

14. *Obv.*—ΑΥ · ΚΑΙC ΑΝΤΩΝ · ΙΝΟC Head of Antoninus Pius r., laur.

Rev.—ΝΕΟΚΛΑΥΔΙΟΠΟ ΛΕΙΤΩΝ. Athena, wearing chiton and helmet, standing towards l.; beside her, shield; l. hand on spear; r. hand holds patera over altar; in ex., ΕΤΡ..

Æ. Size 1. [Pl. IX. 4, *rev.*]

This coin is new, though a standing Athena occurs on a coin of J. Domna.²¹ Unfortunately, it is not decisive as

¹⁸ *Brit. Mus. Cat., Central Greece*, p. 24, No. 2.

¹⁹ *Νομισματικὴ τῶν Δελφῶν*, p. 21, Nos. 10—11; Pl. XXV. 20—24.

²⁰ *Brit. Mus. Cat., Crete, &c.*, Plate XXVI. 1.

²¹ Imhoof-Blumer in *Zeit. für Num.*, xx. 272.

to the Era or Eras employed at Neoclāudiopolis. The Era used on the coins of Commodus and of Sept. Severus and his family appears to date from B.C. 6-5.²² But according to Mionnet, another Era also occurs, dating from B.C. 45 (or from B.C. 48, the Cæsarian era; Head, *H. N.* p. 433). This Era has only been suggested by a coin stated (Mion. *Sup.* iv. p. 568) to be of Antoninus Pius (*rev.* Asklepios) and to read ΕΤ ΡΘΑ (year 191). Probably, as Mr. George Macdonald has shown, only one Era (B.C. 6-5) was in use at this city, and Mionnet has either misread the date or has mistaken the head of Commodus for that of Antoninus. The first numeral on our new coin is almost certainly the upper part of P, while the following numerals may perhaps be Ξ and Α (161).

APOLLONIA AD RHYNDACUM (MYSIA).

15. *Obv.*—ΓΙΟΥ ΟΥΗΡ ΜΑΞΙΜΟΣ ΚΑΙC Bust of Maximus r., wearing paludamentum and cuirass; head bare.

Rev.—ΑΠΟΛΛΩ ΝΙ Α Bearded river-god (the
ΤΩΝΡΥΝ Rhyndacus), wearing
ΔΑΚΟ himation over lower
limbs, reclining l.; r.
hand resting on prow²³
before him; l. hand on
overturned vase.

Æ. Size 1·3. [Pl. IX. 5, *rev.*]

ΡΥΝΔΑΚΟ is apparently for ΡΥΝΔΑΚΟC, and is to be treated as descriptive of the type, and (indirectly) as a distinguishing designation of the Apolloniates. The

²² Imhoof (*l. c.* referring to Ramsay); *Griech. M.*, p. 584 and p. 594; Macdonald, *Journ. int.* II. 17 f.

²³ Cp., e.g., the representation of the river Halys on coins of Tavium, *Brit. Mus. Cat., Galatia*, pl. v. 9.

legend ΑΠΟΛΛΩΝΙΑΤΩΝ ΡΥΝΔΑΚΟΣ, with the reclining river-god, is found on other coins of Apollonia.²⁴

Inscriptions such as ΑΠΟΛΛΩΝΙ · ΡΥΝ (type, lyre)²⁵ and ΑΠΟΛΛΩΝΙ · ΡΥΝΔΑ (type, female figure standing)²⁶ are more difficult because they are not accompanied by the river-god type. ΡΥΝ, &c., must either be for ΡΥΝΔΑΚΟΥ or a preposition must be understood—ΠΡΟΣ (as in ΑΠΟΛΛΩΝΙΑΤΩΝ ΠΡΟΣ ΡΥΝΔΑΚΩ²⁷) or ΑΠΟ (as in ΑΠΟΛΛΩΝΙΑΤΩΝ ΑΠΟ Ρ).²⁸

PERGAMUM (MYSIA).

16. *Obv.*—Cista mystica with half-open lid, from which a serpent issues l.; whole in ivy wreath.

Rev.—C PVLCHER Two coiled serpents; between
PROCOS them, bow-case ornamented
with aplustre; in field l. ~~me~~;
in field r., staff (or thyrsus)
entwined by serpent; in
exergue, ΚΑΥCΙΛΟC.

R. Size 1·1. Wt. 186·5 grs.

Pergamene Cistophori of C. Claudius Pulcher, Proconsul of Asia B.C. 55-54?, are already known with the names (written in Greek) of five different local magistrates, namely Bion, Euanthes, Machaon, Menodoros, and Menophantos.²⁹ Kausilos is a new magistrate. The

²⁴ Babelon, *Inventaire Waddington*, No. 653; Imhoof-Blumer, *Griech. M.*, p. 610; Pl. VI. 28.

²⁵ Leake, *Num. Hell.*, *As. Gr.*, p. 26.

²⁶ Babelon, *op. cit.*, No. 644.

²⁷ Babelon, *op. cit.*, No. 654; *Brit. Mus. Cat.*, *Mysia*, p. 11, No. 23.

²⁸ Babelon, *op. cit.*, No. 645.

²⁹ Waddington, *Fastes*, No. 81 (p. 61, ed. Paris, 1872); Babelon, *Inventaire Waddington*, Nos. 6965—6967. A specimen

name is a curious one, not mentioned in Pape's *Wörterbuch*, but the reading of the coin is quite certain.

ALEXANDRIA TROAS.

17. *Obv.*—**M AVRELAN TONINV.** Bust of Caracalla r., laur., wearing paludamentum and cuirass.

Rev.—**COLAV GTROAD** Male figure, in himation, facing, and leaning, with legs crossed, against tall column surmounted by statue of Apollo Smintheus, who holds bow and patera.

Æ. Size .95. [Pl. IX. 6, rev.]

A variety of a quasi-autonomous coin (*obv.* Turreted female head) described in Mionnet.³⁰ The coin in Mionnet shows a vase or fountain on the left of the column.

The standing figure can hardly be the Emperor and is not the herdsman who appears on the coins of Alexandria, and whose usual costume is a short chiton. On coins published by Imhoof-Blumer (*Griech. Münzen*, pp. 625, 626; Pl. VII., 25, 26), two youthful male figures, each wearing a himation over the lower part of the body, are seen seated near a tripod in the presence of the herdsman who plays a seemingly important part in connection with Apollo Smintheus at Alexandria.³¹ One of these figures is possibly Apollo himself, the other has not been identified; but he may be identical with the personage on our coin who seems to have the upper part of his body bare, though it is not clear whether he is beardless or not. On the other hand, our figure may also be compared with the

of the "Machaon" cistophorus was purchased by the British Museum in 1898. A "Menodoros" cistophorus was purchased by the Museum at the Bunbury Sale, 1896, Part II., lot 97.

³⁰ *Sup. v.*, p. 512, No. 93, correcting ii., p. 644, No. 105.

³¹ *Cp. Brit. Mus. Cat., Troas, &c.*, p. xvii. f.

fully draped bearded figure who stands before the statue of Apollo Smintheus on other coins of Alexandria (*Brit. Mus. Cat., Troas*, Pl. IV. 6; V. 4).

TEMNUS (AEOLIS).

18. *Obv.*—Head of Apollo l., laur.

Rev.—T A Kantharos; border; whole in circular incuse.

R. Size 4. Wt. 14 grs. [Pl. VIII. 2.]

This coin, kindly presented by Mr. Alfred J. Lawson, of Smyrna, is unpublished. From style and fabric it may be assigned to the fourth century B.C. The only other silver coin of Temnus (also with the head of Apollo) belongs to the later coinage of the city—second or first century B.C.³² The prevailing types at Temnus are Dionysiac, and the “town-arms” was probably a bunch of grapes.³³

EPHESUS.

Tetradrachms. B.C. 387—295.³⁴

19. *Obv.*—E Φ Bee with straight wings; border of dots.

Rev.—Forepart of kneeling stag r., head turned back; behind, date-palm; in field, magistrate's name.

During the past year the Museum acquired nine specimens of this type bearing rare or unpublished magistrates' names, as follows:—

³² Alexandrine coins have also been assigned to Temnus.

³³ Wroth, *Brit. Mus. Cat., Troas, &c.*, pp. lix, lx.

³⁴ Head, *Coinage of Ephesus*, p. 83 f.; *Brit. Mus. Cat., Ionia*, p. 51 f.

- a. **ΑΜΥΝΤΩΡ** (Size .95. Wt. 224.2 grs.) Also in Waddington Coll.; Babelon, *Inventaire*, No. 1524.
- b. **ΒΑΛΑΙΘΟ** (Size .95. Wt. 224.3 grs.)
- c. **ΗΓΕΚΛΗ** (Size .95. Wt. 227.) Cp. Head, *Coinage of Ephesus*, p. 35.
- d. **ΘΕΞΞΑΛΟ[Ξ]** (Size .95. Wt. 231.5.)
- e. **ΚΛΕΑΣ** (Size .9. Wt. 235.9.)
- f. **ΚΛΕΟΜΗΔΗ[Ξ]** (Size .95. Wt. 230.6.)
- g. **ΜΑΝΤΙΚΡΑΤΗ[Ξ]** (Size .95. Wt. 230.6.) Also in Waddington Coll.; Babelon, *Inventaire*, No. 1534; cp. Head, *Coinage of Ephesus*, p. 35, note 7; Imhoof, *Griech. M.*, p. 637, No. 273.
- h. **ΓΗΛΕΦΟΣ** (Size .9. Wt. 231.8.) The initial letter is certainly Γ, not Τ.³⁵
- i. **ΤΙΜΗΣΙΑΝΑ[Ξ]** (Size .9. Wt. 233.3.) The name occurs on drachms of B.C. 415—394.³⁶

Drachm. B.C. 387—295.

20. *Obv.*—[E off the flan] Φ. Bee with straight wings; in field r., astragalus.³⁷

Rev.—Forepart of kneeling stag r., head turned back; behind, date-palm; in field r., ΚΛΕΟΝΙΚΟΣ

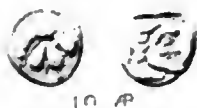
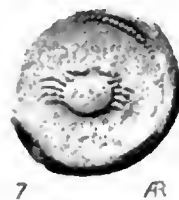
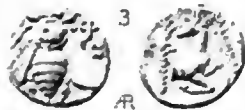
Æ. Size .55. Wt. 56.5 grs. [Pl. VIII. 3.]

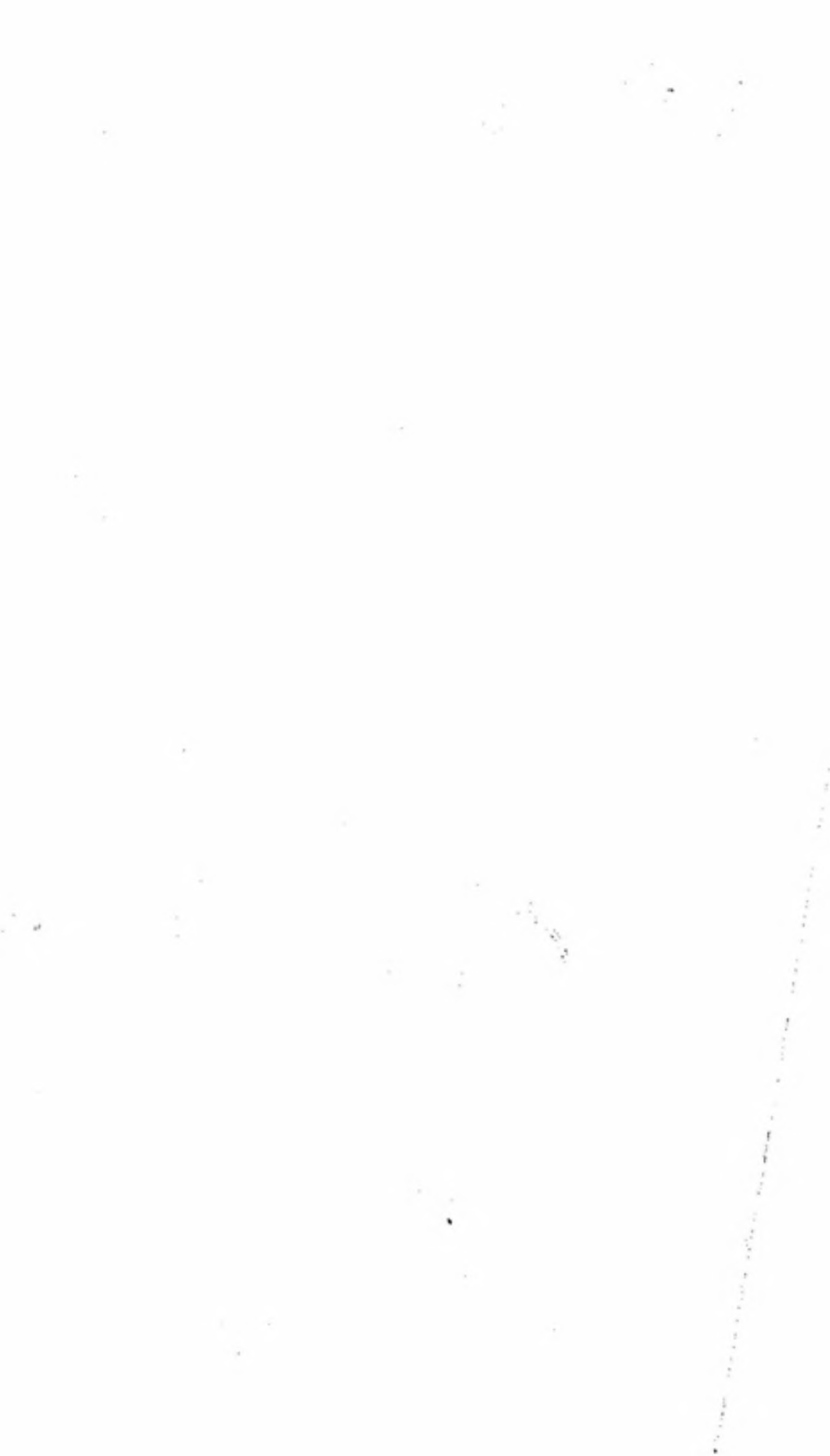
The name occurs on tetradrachms of the same period (Head, *Coinage of Ephesus*, p. 35; Babelon, *Inventaire Waddington*, No. 1532).

³⁵ **ΤΗΛΕΦΟΣ** occurs Babelon, *Inventaire Waddington*, No. 1598. Æ.

³⁶ Head, *Coinage of Ephesus*, p. 23; *Brit. Mus. Cat.*, *Ionid*, 50, No. 20; *Num. Chron.*, 1881, p. 16.

³⁷ The astragalus occurs as a symbol on bronze coins of Ephesus, B.C. 305—280; *Brit. Mus. Cat.*, *Ionid*, pp. 54—56.





Cistophorus. C. Fannius, Praetor. B.C. 48.

21. *R.* Size 1·05. Wt. 187 grs. Types similar to *Brit. Mus. Cat., Ionia*, p. 68; Pl. XII. 11,³⁸ but the local magistrate's name in the exergue of the reverse is **APATOC** instead of **APXI-ΔΗΜΟC**.

HERACLEA AD LATMUM (IONIA).

22. *Obv.*—Head of Athena r., wearing crested Corinthian helmet.

Rev.—**ΗΡΑΚΛΕ** Club r.; the whole in laurel-wreath.
ΩΤΩΝ

R. Size ·75. Wt. 79·2 grs. [Pl. VIII. 4, *obv.*] Cp. Dressel, *Z. f. N.*, xxi. p. 221.

23. *Obv.*—Similar to No. 22.

Rev.—Similar to No. 22.

R. Size ·8. Wt. 76·5 grs. [Pl. VIII. 5.]

Second century B.C. A silver coin of a lower denomination (38·2 grs.), is described in *Brit. Mus. Cat., Ionia*, p. 151, No. 3 = *Num. Chron.*, 1886, p. 257, Pl. XI. 12 (Gardner).

SAMOS.

24. *Obv.*—Lion's scalp.

Rev.—**ΞΑ** Forepart of bull r.; around body, ornamental bands; truncation dotted; behind, olive-branch; above, **ΜΟΙΡΙΑΔΗ[Ξ]**; struck on a somewhat small flan without trace of incuse square.

R. Size ·85. Wt. 228 grs. [Pl. VIII. 6.]

A tetradrachm of the period B.C. 394-365. The magistrate is new on the coins of Samos, and bears apparently

³⁸ Also Babelon, *Inventaire Waddington*, No. 6981.

a somewhat uncommon name. A Μοιριάς is mentioned in Demosthenes, *c. Aphob.* i. p. 822. The ornamentation on the bull differs from that usually found (ep. Head, *Brit. Mus. Cat., Ionia*, Pl. XXXV. 14, 15; Gardner, *Samos*, Pl. III., No. 2). At the first glance, it has the appearance of a wreath of ivy-leaves with berries; but it seems really to be a series of bands or cords fastened to studs, which were probably of gold.

The meaning of the bull as a Samian type still remains uncertain.³⁹ The ornamentation on the animal at this period might seem to indicate that a sacrificial victim was represented, though, were such a victim intended, we should rather expect that the horns would display the sacred fillets or be otherwise decorated.

Cos.

25. *Obv.*—ΚΩΙΩΝ Naked athlete preparing to hurl the discus; behind him, tripod on basis; border of dots.

Rev.—Crab within circle of dots; whole in circular incuse.

R. Size .95. Wt. 253 grs. [Pl. VIII. 7.]

The strained action and contorted body of the Discolobos—"distortum et elaboratum" (*Quintil.* 2, 13, 10)—are especially noticeable when compared with other Coan staters of the same type, *e.g.*, *Brit. Mus. Cat., Caria*, p. 194, No. 9; Pl. XXX. 5. The last-named coin is of the fifth century B.C., and according to Mr. Head (*loc. cit.*), late in the century. Our coin may be somewhat later. The reverse of our coin is also noteworthy from having the crab in a

³⁹ Gardner, *Samos*, p. 15 f.

dotted circle instead of in a dotted square.⁴⁰ The dotted (reverse) circle—though some further instances of it may come to light—did not find favour at Cos and the dotted square, introduced in the fifth century (cp. *Brit. Mus. Cat., Caria*, p. 194, No. 9; cp. No. 6), finally prevailed and is commonly found on its coins from B.C. 366 onwards.

TRALLÆS (LYDIA).

26. *Obv.*—Lion's skin hanging over club; whole in wreath.

Rev.—ΣΩ ΧΑ written above bunch of grapes placed on vino-leaf; in field l., ΤΡΑΛ.

Æ. Size 7. Wt. 46 grs.

An unpublished quarter-cistophorus.

ÆZANI (PHRYGIA).

27. *Obv.*—ΑΥΤΟΚ · Μ · ΑΥΡΗ ΛΙΟΣ · ΑΙΤΩΝΙ
ΛΙΟΣ⁴¹ Head (bare) of M. Aurelius r.

Rev.—ΑΙΖΑΝ · ΕΥΡΥΚ ΛΗΣ · ΤΗ · ΓΕΡΟΥΣΙΑ.
Two youthful male figures, naked (the Kuretes), standing, turned towards one another; each wears pointed cap (helmet?) and holds in r. short sword, and in l. spear and shield.

Æ. Size 1·7. [Pl. IX. 10, *rev.*]

The reverse die of this coin was used also in conjunction with an obverse die of Lucius Verus, as appears from a specimen in the Loebbecke Collection (*Z. f. N.* xii. 340; Pl. XIV. 2). The two figures are called by Loebbecke the Dioskuri, but the shields and short swords plainly

⁴⁰ A similar reverse occurs in Imhoof-Blumer, *Monn. Gr.*, p. 319, No. 101; *Chor.*, Pl. IV. 146 (*rev.*). On the Discobolos, see Jüthner, *Ant. Turnergeräte*, p. 31 f.

⁴¹ In both *obv.* and *rev.* legends Α is written Λ.

show that the Kuretes are represented,⁴² no doubt in connection with the local cultus of Zeus.⁴³

The official position, as *γραμματεὺς* and Asiarch, of the Eurykles, who dedicated this coin to the *γερονσία* (the local senate), is made clear from another coin of Aezani, of Imperial times,⁴⁴ with the inscription ΕΠΙ ΓΡΑ · Μ · ΟΥΛ · ΕΥΡΥΚΛΕΟΥΣ · ΑΣΙ (type, Asklepios).

JULIA (PHRYGIA).

28. *Obv.*—ΙΕΡΑ ΒΟΥΛΗ Head of the Boule r., veiled; border of dots.

Rev.—Ι ΟΥΛ ΙΕΩΝ Female figure (Homonoia), wearing chiton and kalathos, standing towards l.; in r. hand, patera held over lighted altar; in l. hand, cornucopiae; border of dots.

Æ. Size .95.

Coins of Julia without Emperors' heads are unpublished or rare. From its flat, thin fabric, this specimen is probably to be assigned to the time of Aemilian, A.D. 253.⁴⁵

TREBENNA (LYCIA).⁴⁶

29. *Obv.*—CABEI · T[P]A NKVΛΛINAN Bust of Tranquillina r.; crescent at shoulder.

⁴² For representations of the Kuretes and Korybantes on coins, see Immisch in Roscher's *Lexikon*, ii., p. 1625 f. ("Kureten").

⁴³ Ramsay, *Historical Geog.*, p. 147.

⁴⁴ Babelon, *Inventaire Waddington*, No. 5545.

⁴⁵ Cp. coins of Julia (Aemilian and Corn. Supera) in British Museum. (Borrell in *Num. Chron.*, viii., 29.)

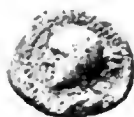
⁴⁶ As to the geographical position of Trebenna, see Hill, *Brit. Mus. Cat.*, *Lycia*, p. lxxviii. f., with references to Ramsay, Lanckoronski, &c.



1 Æ



2 Æ



3 Æ



4 Æ



5 Æ



6 Æ



7 Æ



8 Æ



9 Æ



10

Æ



11 Æ



12 Æ



13 Æ

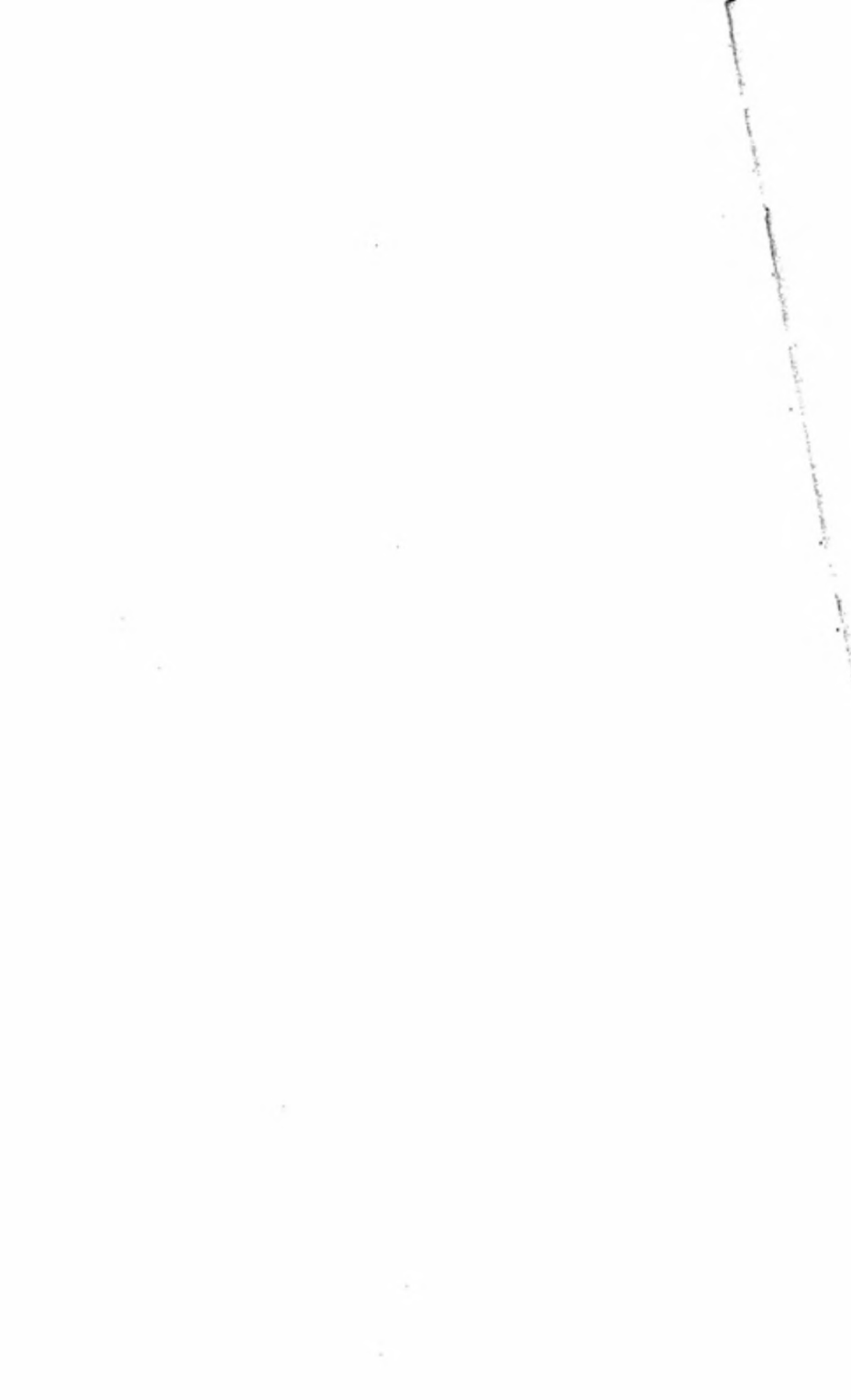


12

Æ



13 Æ



Rev.—ΤΡΕΒΕΙ ΝΝΑΤΩΝ Tyche, wearing modius, chiton, and peplos, standing l.; in r., rudder; in l., cornucopiæ.

Æ. Size 1·05. [Pl. IX. 8, *rev.*]

Unpublished. The usual coin legend is ΤΡΕΒΕΝ-ΝΑΤΩΝ, but the Ι on the present specimen is quite clear. In the Waddington Collection⁴⁷ is another coin of Tranquillina, with type, Athena standing.

PERGA (PAMPHYLIA).

30. *Obv.*—ΠΟΛΙΚΑΛΩΝΟΒΑΛΕΡΙΑΝΟΣΕΒ. Bust of Saloninus r., laur.; in front, Ι; beneath, eagle with wings displayed.

• *Rev.*—
ΙΕΡΑ
ΛΑΜΠΡΑ
ΕΝΔΟΞΟΣ
ΝΕΩΚΟΡΟΣ within wreath.
ΠΕ[ΡΓ]Η
ΠΡΩΤΗ

Æ. Size 1·2. [Pl. IX. 7, *rev.*]

The same inscription occurs at Perga on a coin of Volusian,⁴⁸ in an abbreviated form:—ΙΕΡΑ . ΛΑΜΠΡ . ΕΝΔΟΞΟ . ΝΕΩΚΟΡ . ΠΕΡΓΗ . Α within wreath. Similar inscriptions proclaiming honorific titles are known from coins of Pergamum,⁴⁹ Smyrna,⁵⁰ Aegeæ (Ciliciae),⁵¹ &c.

⁴⁷ Babelon, *Inventaire Waddington*, No. 3200.

⁴⁸ Babelon, *Inventaire Waddington*, No. 3409.

⁴⁹ *Brit. Mus. Cat., Mysia*, Pergamum, No. 318.

⁵⁰ *Brit. Mus. Cat., Ionia*, Smyrna, No. 405.

⁵¹ *Brit. Mus., Macrinus*.

AMBLADA (PISIDIA).

31. *Obv.*—ΑΥΤΚΑΙΣΜΙΟΝΑΦΙΛΙΠΠΟΣ Bust of Philip, junr., r., radiate, wearing paludamentum and cuirass.

Rev.—ΑΜΒΛΑΔΕΩΝΛΑΚΕΔΑΙ Trophy.

Æ. Size 85. [Pl. IX. 12, *rev.*]

The reverse type is perhaps connected with the warrior who appears on Imperial coins of Amblada.⁵²

SAGALASSUS (PISIDIA).

32. *Obv.*—CE · CΑΛΩΝΕΙΝΑ. Bust of Salonina r.; in front, 5

Rev.—CΑΓΑ ΛΑCΕΥΝ (*sic*). Eagle to front; head turned l., holding wreath in beak.

Æ. Size 1·25. [Pl. IX. 9, *rev.*]

SELGE (PISIDIA).

33. *Obv.*—ΙΟΥΛΑ ΑΥΓΟΥ. Bust of Julia Domna r.

Rev.—CΕΛ ΓΕΩΝ Athena, wearing helmet and chiton, standing to front, looking r.; with l. hand drops pebble into urn; r. hand supports spear and shield.

Æ. Size 5. [Pl. IX. 11.]

A variety of this reverse (*obv.* Caracalla) is described, though imperfectly, in Fox's *Engravings*, &c., II., No. 126. Athena is known at Selge from an inscription,⁵³ and from other coins of the place.⁵⁴

⁵² *Brit. Mus. Cat., Lycia*, &c., p. 173, No. 1; *Z. f. N.*, xvii, p. 12, No. 1 (Loebbecke).

⁵³ Cp. Hill, *Brit. Mus. Cat., Lycia*, &c., p. cxv, n.

⁵⁴ See e.g., Babelon, *Inventaire Waddington*, under "Selge."

TIRAEUS II, KING OF CHARACENE.

34. *Obr.*—Head of Tiraeus II, r., wearing diadem.

Rev.—[B]ΑΣΙΛΕΥΣ Nike standing l.; r. hand outstretched
TIPA [holding wreath]; l. hand by her
side [holding palm-branch]; above
r. hand of Nike, traces of mono-
gram (⌘?).

Æ. Size 7. [Pl. IX. 18.]

This coin, kindly presented by Mr. H. F. Amedroz, resembles the specimen in the French Collection published by M. Waddington (*Mélanges*, ii. p. 88; Pl. VI. 5), but with an engraving which hardly does justice to the portrait, which closely resembles the head on the tetradrachms of the same king.

Lucian (*Macrobii*, 16) mentions Tiraeus as the third successor of Hyspaosines, and as dying at the age of ninety-two. There has hitherto been some difficulty about the order of succession, but it has now been made clear, on numismatic grounds, by M. Babelon,⁵⁵ as follows:—

1. Hyspaosines, reigning B.C. 124.
2. Apodacus, reigning B.C. 109.
3. Tiraeus I, reigning B.C. 89.
4. Tiraeus II, reigning B.C. 60—39.

ANTIMACHUS, KING OF BACTRIA.

35. *Obr.*—ΕΥΘΥΔΗΜ[ΟΥ] Head of Euthydemus I r.,
ΘΕΟΥ wearing diadem.

⁵⁵ *Journal internat. d'arch. num.*, 1898, p. 384 ff. The coin of Tiraeus I, has only recently been made known, *ib.* p. 386; Babelon, *Inventaire Waddington*, No. 7323.

Rev.—**ΒΑΣΙΛΕΥΟΝΤΟΣ** Herakles, naked, seated l.
ANTIMAXOY on rock; r. hand holds
club, which rests on
part of rock seen be-
hind; l. hand rests on rock; beneath rock, **Α**.
In ex., **ΘΕΟΥ**.

R. Size 1·15. Wt. 247·3 grs. [Pl. VIII. 9.]

This unique coin was purchased last year from a firm of Indian coin dealers, and is the specimen briefly referred to in Mr. Rapson's dissertation (§ 22) on Indian coins in Bühler's *Grundriss der Indo-Arischen Philologie*.⁵⁶ It belongs to the interesting class of *commemorative* Bactrian coins. The four pieces of this kind issued by Agathocles are well known, and commemorate Alexander the Great, Antiochus "Nikator," Diodotus "Soter," and Euthydemus "Theos."⁵⁷ Antimachus was already known to have issued one such coin, in memory of Diodotus Soter.⁵⁸ The new coin shows that he further followed Agathocles in commemorating Euthydemus. Here, and on the coins with his own portrait,⁵⁹ Antimachus styles himself **ΘΕΟΥ**, a title not previously used by a living Bactrian king, and one probably suggested by the **ΕΥΘΥΔΗΜΟΥ ΘΕΟΥ**. He also adopts from the commemorative series of Agathocles the uncommon ex-

⁵⁶ In view of the many forgeries of Bactrian coins (cp. *Z. f. N.*, xx. 327), it is perhaps necessary to state that this specimen bears every mark of genuineness.

⁵⁷ Gardner, *Greek and Scythic Kings of Bactria*, p. xxviii; Rapson, *loc. cit.*

⁵⁸ In the collection of the late Sir E. C. Bayley (now in the possession of his widow, Lady Bayley); described, Gardner, *op. cit.*, p. 164; Pl. XXX. 6. The monogram **Α** on the reverse of this Antimachus-Diodotus coin is the same as that on the new coin of Antimachus-Euthydemus.

⁵⁹ Gardner, *op. cit.*, p. 12.

pression ΒΑΣΙΛΕΥΟΝΤΟΣ. Probably the object in employing the participle was simply to avoid the use of ΒΑΣΙΛΕΩΣ. The latter word generally seems to imply that no one but the king, whose name and portrait appear, has any part or lot in the coinage. In these series, however, the portraits and even the reverse types are those of the personages commemorated, and not of the issuing king, who is content, for the moment, to play a relatively subordinate part in the coinage.

CYRENE.

36. *Obv.*—Fruit of silphium; above which, genet (*genetta*) crouching l., with head lowered; border of dots.

Rev.—Head of bearded Zeus Ammon r., horned; incuse square.

R. Size .45. Wt. 32.7 grs. [Pl. VIII. 10.]

This coin (a hemi-drachm, *cir.* B.C. 480) is unpublished, but it should be compared with a contemporary hemi-drachm of Cyrene, in the Imhoof-Blumer collection:—

Obv.—Fruit of silphium; above which, genet r.; border of dots.

Rev.—Head of negro r.; incuse square.

R. 2.00 grammes.

(Described Müller, *L'anc. Afrique*, Suppl., p. 2, No. 26a; engraved, Bompais, *Cyrénaïque*, Pl. III. 3, p. 117, No. 3; photographed (*obv.* only), Imhoof-Blumer and Keller, *Tier- und Pflanzenbilder*, Pl. II. 2, p. 10, No. 2).

Bompais called the animal a jerboa, but his description was rightly disputed by L. Müller, who was inclined

(*op. cit.*, p. 3) to see in it a weasel, citing the curious statement of Herodotus (iv. 192), as to the connection of the silphium and the weasel in Libya:—*εἰσὶ δὲ καὶ γαλέαι ἐν τῷ σιλφίῳ γινόμεναι*. We may perhaps concede, with Polonius, that "it is backed like a weasel," but according to Imhoof-Blumer and Keller, whose identification seems much better founded, the animal is the pale genet (*genetta*) of Northern Africa—"die in der Berberei gewöhnliche blasse Ginsterkatze."

37. *Obv.*—Head of bearded Zeus Ammon r., horned.

Rev.—Three silphium plants radiating from one centre; border of dots (flat fabric, without incuses).

R. Size 4. Wt. 14 grs. [Pl. VIII. 11.]

(Trihemi-obol, *circ.* B.C. 431; cp. Head, *Hist. Num.*, p. 729).

CARTHAGE.

38. *Obv.*—Head of Persephone l., wearing earring, necklace, and wreath of corn.

Rev.—Punic inscription (= Byrsa?).⁶⁰ Palm-tree, in front of which, horse prancing r.

N. Size 1.2. Wt. 349.2 grs. [Pl. VIII. 8.]

Compare the specimens (Paris and Madrid) of this gold six-drachm piece described in Müller, *L'anc. Afrique*, II., p. 86, No. 76 (fig.)=Head, *Hist. Num.*, p. 740. The specimen acquired by the British Museum is distinct from one sold at Sotheby's on 20 Jan. 1898, lot 109.

⁶⁰ On this inscription, see Müller, *L'anc. Afrique*, II. p. 122 f.

UNCERTAIN ELECTRUM.

39. *Obv.*—Bull's head facing.

Rev.—Incuse square irregularly divided.

El. Size .3. Wt. 10.3 grs. [Pl. VIII. 12.]

This little coin, purchased from a foreign coin-dealer, seems to be identical with the specimen that was formerly in the collection of M. Alfred de Courtois, and which was published by him in the *Revue numismatique* for 1864, p. 189 f.; Pl. VII. 10. M. de Courtois attributed the coin to Eretria, stating that it was found in Euboea.

WARWICK WROTH.

VI.

THE SHREWSBURY MINT AND ITS OFFICERS UNDER HENRY III.

THE following contemporary documents seem to be worthy of the attention of numismatists, as they contain a full account of the operations of the mint at Shrewsbury in 1249-50, when Henry III's long-cross coinage was first issued; and incidentally they throw some light on the position and duties of moneyers and of the other officers of provincial mints.

The mint at Shrewsbury, where coins had been struck continuously from at least as early as the reign of Ethelstan, 925 to 941, had been discontinued, like many other mints, by King John; but in 1248 Henry III revived many of the old mints, and among them that of Shrewsbury, for the purpose of issuing his new coinage. By a writ dated in this his 33rd year, he commanded the Bailiffs and good men of Shrewsbury that in full Town Court they should choose by the Oath of four and twenty good men four persons of the most trusty and prudent of their town for the office of Moneyers in that Town, and other four like persons for the keeping of the King's Mints there, and two fit and prudent Goldsmiths to be Assayers of the money to be made there, and one fit and

trusty Clerk for the keeping of the Exchange; and to send them to the Treasurer and Barons of the Exchequer, to do there what by ancient custom and assize was to be done in that case.¹ The dies for the new money were delivered to the Keepers of the Mint at London, and by them, no doubt, to the persons elected in the several towns.

The Roll, of which the following is a copy, is still in existenece among the Shrewsbury Borough Records (No. 2686, Box lxxvi.). It is an account of the Assays made by the keepers of the Dies between 29th January, 1248-49, and 9th February, 1249-50; and it gives the names of the two fit and prudent Goldsmiths elected to be Assayers by virtue of the writ. They were Alan le Prude and William le Bor, but between 4th and 30th October, 1249, Alan le Prude had been replaced by Thomas Gherard.

Rotulus de Assayis factis per Custodes Cuneorum Salopp. incipient: die Jovis proximo ante festum Purificationis beate Marie anno regni regis Heurici xxxiii.

E duabus forgiis vi assaia et xx^{li} eodem festo Purificationis.

E forgiis Alani le Prude et Willielmi le Bor die Martis proximo ante festum sancte Juliane virginis et martyris iiii assaia et xviii^{li}.

Die Mercurii proximo ante festum sancti Petri in Cathedra de forgiis Willielmi le Bor et Alani le Phrude iiii assaia et xv^{li}.

Die Veneris proximo ante festum sancti Mathie Apostoli de forgiis Willielmi le Bor et Alani le Phrude iiii assaia et xxvii^{li}.

Die Jovis proximo ante festum sancti Gregorii de forgiis Alani le Phrude et Willielmi le Bor v assaia et vi^{li}.

Die Martis proximo post festum sancti Gregorii de forgiis Alani le Phrude et Willielmi le Bor v assaia et iiii^{li}.

Diebus lune et martis proximis ante Annunciationem beate Marie de forgiis Willielmi le Bor et Alani le Phrudo vii assaia et ii^{li}.

¹ Madox's *Hist. of the Exchequer*, ii. 89.

Diebus Mercurii et Jovis proximis ante diem Pasehe de forgiis Willielmi le Bor et Alani le Phrude vii assaia et ix^{li}.

Diebus Mercurii et Jovis post Clausum Pasehe de forgiis Alani le Prude et Willielmi le Bor xii assaia et xx sol.

Die Mercurii proximo ante festum apostolorum Philippi et Jacobi de forgiis Willielmi le Bor et Alani le Prude vii assaia et xxviii^{li}.

In vigilia Ascensionis Domini de forgiis Alani le Prude et Willielmi le Bor v assaia et xviii^{li}.

Die Martis proximo ante Pentecost de forgiis Alani le Prude et Willielmi le Bor ix assaia et xxiii^{li}.

Die Martis proximo ante festum sancti Barnabe apostoli de forgiis Alani le Prude et Willielmi le Bor x assaia et xvi^{li}.

Die Mercurii proximo ante Nativitatem sancti Johannis Baptiste de forgiis Willielmi le Bor et Alani le Prude v assaia et xiii^{li}.

Die Mercurii vigilia sancti Johannis Baptiste de forgiis Alani le Prude et Willielmi le Bor iii assaia et ix^{li}.

Die Sabbati proximo ante festum Apostolorum Petri et Pauli de forgiis Alani le Prude et Willielmi le Bor iii assaia et xii^{li}.

Die Veneris proximo post festum Apostolorum Petri et Pauli de forgiis Willielmi le Bor et Alani le Prude v assaia et xvii^{li}.

Die Jovis proximo ante festum sancti Mario Magdalene de forgiis Willielmi le Bor et Alani le Prude viii assaia et xix^{li}.

Die Lune in crastino sancti Jacobi Apostoli de forgiis Alani le Prude et Willielmi le Bor vi assaia et xvii^{li}.

Die Sabbati vigilia beati Petri ad vincula de forgiis Alani le Prude et Willielmi le Bor ix assaia.

Die Veneris proximo ante festum sancti Laurentii de forgiis Willielmi le Bor et Alani le Prude vii assaia.

Diebus Martis et Mercurii proximis ante assumptionem beate Marie de forgiis Willielmi le Bor et Alani le Prude vii assaia.

Die Veneris proximo post assumptionem beate Mario de forgiis Willielmi le Bor et Alani le Prude vi assaia et xii^{li}.

Die Jovis proximo post festum sancti Bartholomei de forgiis Alani le Prude et Willielmi le Bor iii assaia et iii^{li}.

Dio Lune proximo vigilia sancti Egidii de forgiis Alani le Prude et Willielmi le Bor iii assaia et iii^{li}.

Here the first roll ends. It is endorsed :

S^a CLX assaia et xi^{li} usque vigil sci Egidii a.r. xxxiii.

On the second roll is the following :—

Vigilia Nativitatis beate Marie de forgiis Alani le Prude et Willielmi le Bor vii assaia et xiiii^{li}.

Diebus Jovis et Veneris proximis ante festum sancti Mathei Apostoli de forgiis Willielmi le Bor et Alani le Prude iii assaia et xxv^{li}.

Die Jovis proximo post festum sancti Mathei Apostoli de forgiis Willielmi le Bor et Alani le Prude ii assaia et xiii^{li}.

Die Jovis proximo post festum sancti Michaelis de forgiis Alani le Prude et Willielmi le Bor ii assaia et xv^{li}.

Die Lune proximo post festum sancti Michaelis de forgiis Alani le Prude et Willielmi le Bor vi assaia et viii^{li}.

Die Sabbati proximo ante festum omnium sanctorum de forgiis Thome Gherard et Willielmi le Bor xi assaia et x^{li}.

Die Mercurii proximo post festum sancti Eadmundi de forgiis Willielmi le Bor et Thome Gherard v assaia et v^{li}.

Die Veneris ante festum sancti Nicholai de forgiis Willielmi le Bor et Thome Gherard iii assaia et xxiii^{li}.

Die Mercurii proximo ante festum sancti Thome Apostoli de forgiis Thome Gherard et Willielmi le Bor iii assaia et iii^{li}.

Die Mercurii proximo post festum sancti Thome Apostoli de forgiis Willielmi le Bor et Thome Gherard iii assaia et xi^{li}.

Die Veneris proximo post festum sancti Illarii de forgiis Willielmi le Bor et Thome Gherard i assaia et xi^{li}.

Die Jovis proximo post festum sancti Pauli Apostoli de forgiis Willielmi le Bor et Thome Gherard ii assaia et xi^{li}.

Die Veneris proximo post festum sancti Pauli de forgiis Thome Gherard ii assaia et v^{li}.

Die Jovis proximo post purificationem beate Marie de forgiis Willielmi le Bor et Thome Gherard ix assaia et xx^{li}.

Die Cinerum anno regni regis Henrici xxxiiii de forgiis Willielmi le Bor et Thome Gherard iii assaia et vi^{li}.

Summa totalis CCxxxi assaia et vi^{li}.

Est summa denariorum vii millia CLX i^{li}.

Translated into English and dated according to the secular calendar, this Roll runs as follows :—

Roll of Assays made by the Keepers of the Dies at Shrewsbury, beginning Thursday, 29 Jan., 1248-9.

From two forges.

[Monday] 2 Feb., 1248-9 6 assays and 20^{li}

From the forges of Alan Prude and William Bor.

Tuesday, 10 Feb.	. . . . .	4 assays and	17£
Wednesday, 18 Feb.	. . . . .	4 „	15£
Friday, 20 Feb.	. . . . .	3 „	26£
Thursday, 11 March	. . . . .	5 „	6£
Tuesday, 16 March	. . . . .	5 „	3£
Monday and Tuesday	} 22 and 23 March	7 „	2£
Wednesday and Thursday	} 31 Mar. and 1 Apr., 1249 ²	7 „	9£
Wednesday and Thursday	} 14 and 15 Apr. ³	12 „	20s.
Wednesday, 28 April	. . . . .	7 „	28£
Wednesday, 12 May	. . . . .	5 „	18£
Tuesday, 18 May	. . . . .	9 „	23£
Tuesday, 8 June	. . . . .	10 „	16£
Wednesday, 23 June	. . . . .	5 „	13£
Wednesday, 23 June	. . . . .	3 „	9£
Saturday, 26 June	. . . . .	4 „	12£
Friday, 2 July	. . . . .	5 „	17£
Thursday, 15 July	. . . . .	8 „	19£
Monday, 26 July	. . . . .	6 „	17£
Saturday, 31 July	. . . . .	9 „	—
Friday, 6 Aug.	. . . . .	7 „	—
Tuesday and Wednesday	} 10 and 11 Aug.	7 „	—
Friday, 20 Aug.	. . . . .	6 „	12£
Thursday, 26 Aug.	. . . . .	4 „	3£
Monday, 30 Aug.	. . . . .	3 „	4£

Total 160 assays and 11£ down to 31 Aug. 1249.

[Tuesday] 7 Sept.	. . . . .	7 assays and	14£
Thursday and Friday	} 16 and 17 Sept.	4 „	25£
Thursday, 23 Sept.	. . . . .	2 „	18£
Thursday, 30 Sept.	. . . . .	2 „	15£
Monday, 4 Oct.	. . . . .	6 „	8£

² Easter Day this year was 4 April.

³ The feast of "the Close of Easter (Clausi Paschæi)" was the week beginning the Sunday after Easter.

From the forges of Thomas Gherard and William Bor.

Saturday, 30 Oct.	11 assays and	10£
Wednesday 17 [or 24] Nov.	5 "	5£
Friday, 3 Dec.	3 "	23£
Wednesday, 15 Dec.	4 "	4£
Wednesday, 22 Dec.	4 "	11£
Friday, 14 Jan., 1249-50	1 "	11£
Thursday, 27 Jan.	2 "	11£

From the forge of Thomas Gherard.

Friday, 28 Jan.	2 assays and	5£
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From the forges of William Bor and Thomas Gherard.

Thursday, 8 Feb., 1249-50	9 assays and	20£
Wednesday, 9 Feb. ⁴	3 "	6£

Sum Total, 231 assays and 6£.

The sum of the pence coined is £7,167.

Such are the documents. It seems certain that the Roll is not an account of assays made of the coins in the sense of testing their weight or fineness, for it contains no allusion to the result of any such test. It is an account of the total quantity of money struck, "assay" signifying that quantity from which a coin or coins were taken and put into a box called a Pix, which would be taken up to London whenever an order was sent for it, and there tested in presence of some of the King's Council.⁵

⁴ Easter Day, 1250, was on 27 March, therefore Ash-Wednesday was 9 Feb. The 34th year of Henry III began 28 Oct., 1249.

⁵ Thus the Abbot of St. Edmunds was ordered in 12 Edward II to send to the Exchequer "*ministros suos cambii sui cum omnibus Pixidibus de assaio capto de moneta Regis monetata in eodem Cambio*," where taking an assay seems clearly to signify taking coins to be tested, and not to signify testing coins.—Madox's *Hist. of the Exchequer*, i., 293, n. Under Edward III, and later, 2s. out of every 100 lb. weight was reserved for the Pix.—Rud. i., 70, 71.

On the first skin are entered 151 assays, 289 lbs., and 20s., and it is endorsed, Total 160 assays and 11 lbs. Thus 20s. being equal to 1 lb., there are 290 lbs., and if 31 lbs. went to an assay, the total comes out as endorsed.

On the two skins together are entered 216 assays and 471 lbs. (reckoning the 20s. as 1 lb.); and at the foot is entered, Sum total 231 assays and 6 lbs. The same reckoning of 31 lbs. to an assay makes this total correct.

Below the total is entered, Sum of the Pence, vii mill. clx iⁿ, but there is a space between the LX and the I, and a little flaw in the parchment. The Tower lb. (= 11 $\frac{1}{4}$ oz. Troy) was made into 240 pence, equal to £1 by tale; so that each penny weighed 24 Tower grains, equal to 22 $\frac{1}{2}$ Troy grains; 231 assays and 6 lbs., at 31 lbs. to the assay, make 7,167 lbs, and no doubt the sum intended to be entered is £7,167 in coined money.

The date of this Roll shows that it represents the first money coined in Shrewsbury under Henry III. It may be that it also represents the whole of that coinage, but even so it shows that a considerable amount of money was issued from the Shrewsbury mint, much more than is equivalent in weight to £20,000 of modern silver money, and certainly equivalent to a great deal more than this in purchasing power. This, however, was the last regular coinage at Shrewsbury, for the mint here, which had existed for more than three hundred years, was permanently abolished by Edward I, and was never revived except for a few months during the civil war in the reign of Charles I.

Let us now see what we can learn about the officers of the mint from these documents. In the first place, they were all to be elected by the Burgesses from among the

men of their town. We know⁶ that at least nine towns received similar writs at the same time, and that besides these nine, Canterbury, Winchester, and London also elected officers of the mint that year. We know also that local elections took place both before and afterwards. The burgesses of Canterbury elected a keeper of the King's dies 22 Hen. III. The Mayor and Sheriffs of London presented an assayer and a keeper of the dies 31 Hen. III. The Abbot of St. Edmond's presented a moneyer for Bury, 42 Hen. III, and the Sacrist presented a moneyer, assayer, and keeper of the dies, 49 Hen. III. The Archbishop of Canterbury's steward presented a moneyer, 52 Hen. III. The keeper of the king's mint in London seems to have nominated an assayer, 1 and 2 Edw. I; but it seems certain that at least under Henry III the officers of the local mints were appointed locally. They had, however, to go up to London, and were there sworn and admitted to their office.

Again, the writ shows that while assayers were required to be fit and prudent goldsmiths, the only qualification necessary for the moneyers and keepers of the mint was that they should be trusty and prudent men of the town. It was not necessary that they should have any technical knowledge. Other records seem to bear this out. Moneyers are everywhere spoken of as men of means, of responsibility, of authority; nowhere as artificers. In the fifth year of Henry II, the moneyers of Norwich paid a donum to the King of £33 6s. 8d., those of Oxford £14, those of Thetford 5 marks;⁷ we find large sums paid in the fourteenth year of the same King by moneyers

⁶ Madox, *Hist. of the Exchequer*, ii., 89.

⁷ Madox, i., 222, note d; 696, note a.

of London, Thetford, and Norwich,⁸ and in the sixteenth year the "men" of William the moneyer, of Carlisle, are fined 100s. for a scuffle.⁹ Henry II, Henry III, and Edward II granted special privileges to the moneyers of York, London, and Canterbury, that they should not contribute towards the tallages imposed on their fellow-citizens;¹⁰ and King John in his ninth year ordered the moneyers, examiners of money, and keepers of the dies of all his mints, to seal up their dies and come to Westminster, and to summon the workers of money of their cities, and all who could give advice as to the making of money, to come with them.¹¹ Here again, therefore, it is evident that the moneyers and other officers named were not themselves the artificers of the coins, but that they were wealthy men, and in a position to give orders to the artificers.

In the case before us four moneyers were to be elected, and on the Shrewsbury specimens of this coinage in the British Museum are four names, Loren, Nicole, Ricard, and Weris. A coin by Reif, however, is given in Owen and Blakeway's *History of Shrewsbury*, so one of the moneyers must have been replaced while the coinage was going on.

The keepers of the mint were to be qualified in the same way as the moneyers. It was they and not the moneyers who accounted for or farmed for their own benefit the profits of the mint. They are perhaps the persons called "examiners of the money" in King John's writ quoted above.

In 13 Henry III, the King leased the mints of London and Canterbury, with the dies and appurtenances, to

⁸ Madox, i, 589.

¹⁰ *Ibid.*, 635, 748.

⁹ *Ibid.*, 560.

¹¹ *Ibid.*, 290.

Richard Reinger for four years for 700 marks per annum, and with the mint £1,420 10s. 8d. was handed over to the new keeper for doing business with; and he and his successors, the keepers of the mint, account regularly for its issues.¹² In the 22nd Henry III, when a keeper of the dies at Canterbury had been elected by the burgesses and sworn at the Exchequer, we find that the keeper of the mint is ordered to receive him; and in 1 Edward I the keeper of the mint named an assayer.¹³ The keeper of the mint, therefore, seems to have had authority over these officers. In 7 Edward I the Mayor of London was one of the keepers of the Mint, and he was ordered to be present at the making of the assay of the coins of London and Canterbury before the Barons of the Exchequer.¹⁴ But in 12 Edward II, when the keeper of the Mint had delivered melted silver to the "Master of the Money" to be coined, and it was tested and found to be debased with too much alloy, it was the "Master of the Money," and not the keeper of the Mint, who was held responsible to the King.¹⁵ And in the same year, when the Bury St. Edmund's money was to be assayed, the abbot sent up with it to London the sacrist of the abbey, who was keeper of the said money, and one Roger de Rede, the Master of the said money.¹⁶ We gather, therefore, that the keepers were responsible for keeping the accounts of the Mint and seeing the regulations carried out, and had authority over the other officers, but not over the moneyers or "Masters of the Money"; and that the latter, and not the keepers, were responsible for the fabric of the coins.

¹² Madox, ii., 184.

¹³ *Ibid.*, ii., 88, note b; 90, note r.

¹⁴ *Ibid.*, i., 291; ii., 90, note u.

¹⁵ *Ibid.*, i., 292, note c.

¹⁶ *Ibid.*, i., 293, note e.

The assayors are the only persons in whom the writ requires technical knowledge, they must be goldsmiths. They are the only persons in whom trustworthiness is *not* specifically required. The Roll tells us that each of them had a forge of his own. They are the only persons whose names are given in the Roll. Prude was, no doubt, of the well-known Shrewsbury family of Pride, which held municipal office in the town constantly during the Middle Ages, and whose name is still borne by one of the principal streets. Gerard also occurs frequently in the Shrewsbury Records, and Bor may have been of the family of Borrey, which was also well-known, and was connected with the Prides. The assayors were in this case, the Roll tells us, the keepers of the dies, though elsewhere we find the two offices separate. They actually made the coins; but they did not make the assays in the sense of testing the fineness or weight of the coins on behalf of the King. No doubt they tested them on behalf of the moneyers, and they put specimens of the coins into the Pix, which were then kept by the keepers of the mint till they were sent for to be tested in London. In this case it will be noticed that there were four moneyers and two assayors; and as each of the four moneyers had his name stamped on the coin, there must have been at least four pairs of dies. On the Roll the names of the two assayors are constantly being transposed, and it will be found that this is done nearly, though not exactly, every fortnight. There must be some reason for this, and we may guess that the coins of two moneyers were stamped the first fortnight, and those of the other two the second.

The Clerk for the keeping of the Exchange is the only other officer mentioned in the writ. He was to be "fit and

trusty," but not, like the moneyers and keepers, "of the most trusty and prudent of the town." Probably he acted under the keepers of the Mint, bought bullion, and kept the accounts of all payments; and these would include not only the ordinary expenses of the Mint, but a number of payments due from the King to persons employed by him in any kind of service in the neighbourhood.¹⁷ Cash received for the King in any neighbourhood was employed for paying his debts there, and only the balance was sent up to London, as is shown by the Pipe Rolls or Sheriffs' accounts.

The evidence seems to point to this. Under Henry III the local mints were worked entirely by local men, but under the authority of the Exchequer Court, and subject to the rules of the Court. The dies were made and supplied in London, the accounts had to be sent up to London, and the coins were tested there. The moneyers were substantial burgesses of the town, who procured the silver and alloy and directed the making of the coins, and were punished, by fine or in person, if the coins were not properly made. The keepers of the Mint were men of the same standing, who saw that the rules of the Exchequer were carried out, and had the custody of and accounted for the coined money. The assayors were goldsmiths and had the custody of the dies and supplied the skilled labour required. The Clerk kept the accounts, for which the keepers were responsible. Probably in much earlier times the moneyers combined all these offices in their own persons.

After Henry III's time, the number of mints was greatly diminished, authority was far more centralised, the

¹⁷ See Madox, ii., 132, for examples of such payments.

moneyers' names ceased to appear on coins, and we find mention made under Edward I and II of a master of the money,¹⁸ a master moneyer,¹⁹ a master of the mint.²⁰ These seem all to have borne the same office, and to have been definitely officials of the mint, which the original moneyers were not. The master moneyer became master of the mint; the moneyers under him became also officials of the mint, but had to do the work formerly done by the goldsmith-assayors, and accordingly we find them under George II supplying the skilled labour of the mint and employing apprentices;²¹ the Keeper or Warden is still the principal officer, but the Master is the most important one and receives the largest salary.²² At last in 1817²³ the office of Warden is abolished, and the Master, representing the ancient moneyer, becomes the principal officer of the mint.

R. LL. KENYON.

¹⁸ Madox, i., 292, note c; 293, note e.

¹⁹ *Ibid.*, ii., 90.

²⁰ Ruding, i., 32.

²¹ Ruding, i., 51.

²² *Ibid.*, i., 21, 24.

²³ Statute, 57 Geo. III., c. 67.

VII.

NOTES ON THE MONETARY SYSTEM OF ANCIENT KAŚMĪR.

(See Plate X.)

THE following notes have been prepared for the commentary which accompanies my translation of Kalhana's RĀJATARAṄGĪ, the earliest of the extant Sanskrit Chronicles of Kaśmīr.¹ They are intended to give a summary and explanation of the data which this work contains regarding the monetary system and currency of Kaśmīr during the period of Hindu rule. As these data are of interest for the study of the coinage of old Kaśmīr, I gladly avail myself of the Editors' kind permission to publish my notes also separately in the pages of the NUMISMATIC CHRONICLE.

1. Kalhana's Chronicle contains numerous passages which state in exact figures prices of commodities, amounts of salaries, and the like, or otherwise refer to the currency of the country. These passages furnish valuable materials for the numismatic and economic history of Kaśmīr. Their evidence, however, cannot be fully utilized unless the character and the value of the monetary system to which they refer, is clearly established.

¹ To be published in 1899 by Messrs. A. CONSTABLE AND CO., London, in two volumes quarto.

The first question which presents itself concerns the value of the term DĪNNĀRA, which we find almost invariably used or implied in Kalhana's monetary statements. This word, undoubtedly derived from the *denarius* of the West, and in non-Kāśmīrian texts more commonly spelt *dīnāra*, is well known to Sanskrit lexicography as the designation of a gold coin: But the manifest impossibility of accepting this meaning for the passages of the Chronicle which mention sums in Dīnnāras, had already struck Dr. WILSON.² Noticing that in two passages figures are given which, if calculated in gold, would be large beyond all credence, he suggested that the "Dīnārs" meant might have been of copper. Curiously enough, however, none of the subsequent interpreters of the Chronicle seems to have followed up the suggestion thrown out by Dr. Wilson, or to have otherwise paid attention to the subject.³

2. If we examine the passages in which Dīnnāras are spoken of by Kalhana, we cannot fail to note that they range themselves under two heads. *Either* Dīnnāras are mentioned in a general way without any particular amount or quantity being specified; ⁴ *or* we have exact statements of cash amounts, coupled with the term *dīnnāra*, and expressed in figures which with rare exceptions move in round

² See WILSON, *Essay on the Hindu History of Cashmir*, pp. 58, 62, notes.

³ TROYER, i., p. 528, reproduces Wilson's suggestion with reference to the price of rice mentioned, *Rājat.*, v. 71. LASSEN, *Ind. Alt.* iii. p. 1009, is content to call the daily payment of 100,000 gold coins to a court poet "an evident exaggeration." In Babu J. C. Dutt's translation I cannot find any notice of the point.

⁴ See *Rājat.*, iii., 103; v., 84 sq., 87, 89, 108; vii., 496 sq., 500, 950; viii., 151 sq., 868, 8885.

hundreds, thousands, lakhs, and crores.⁵ That in the first case the term *dinnāra* had to be taken in the general sense of "coin" or "money," was made quite evident by the passage, vii. 950, which mentions under King Harṣa "Dinnāras of gold, silver, and copper." Here we have clearly the word *dinnāra* in the sense of *mudrā*, "coin," distinctly given to it by the Uṇādikoṣa.⁶

As regards the second class of passages, we have important evidence in a note of the old and well-informed glossator A. Explaining Kalhaṇa's expression "*dinnārāṇāṃ daśaśatīm*" (ten hundred Dinnāras) in v. 38, he states plainly that *dinnārāḥ* means the same as *dyār* in Kāsmīrī.⁷ The latter word is commonly used to this day in the sense of "money," in particular "coined money" or "cash." It is evident that according to the interpretation of the glossator *dinnāra* is not the designation of any particular monetary value, but a term of much more general significance, corresponding somewhat to our "cash" or "currency."

3. It fully agrees with this interpretation that in numerous passages we see plain figures, without the addition of the word *dinnāra*, used exactly in the same way for the indication of money amounts. By the side of the passage, iv. 495, which mentions "one lakh Dinnāras" as the daily pay of the Sabhāpati Udbhaṭa, we have others like vii. 145, where the daily pay of Rudrapāla Śāhi is referred to by the simple term of "one lakh and a half." It is difficult here to avoid the conclusion that the currency meant is the same in both cases.

⁵ See *Rajāt.*, iv., 495, 617, 698; v., 71, 116 sq., 205; vi., 38; vii., 123, 1118, 1220 sq.; viii., 124, 1918.

⁶ See the reference quoted by BOKHTLINGK-ROTH, s. v.

⁷ *Dinnārāḥ dyār iti Kāsmīrabhāṣayā.*

Equally significant evidence may be deduced from the anecdote which is told in Uccala's reign of the depositor and the merchant. Here the sum originally deposited is described, viii. 124, as "a lakh Dīnnāras" (*dīnnāralakṣa*). In the subsequent narrative the fraudulent Baiṇū is made to give details as to the various items of expenditure which are supposed to have exhausted the deposit (vii. 136 *sqq.*). These items are then invariably expressed by figures moving in round hundreds, to which neither the word *dīnnāra* nor any other term indicative of a monetary value is added.

This fictitious account is instructive also from another point of view. For such trifling expenses as the repair of a shoe and whip, purchase of honey and ginger for a sick child, a load of broken pots, etc., we find sums of "one hundred," "three hundred," etc., charged in the account. It is thus manifest that the basis of the currency to which these figures refer must be a very low one. The same conclusion is forced upon us by those passages where Kalhaṇa, relating events near his own time, and known to him evidently on good authority, mentions sums which, unless calculated on such a basis, would appear on the face of it extravagant and impossible. Thus we have the *daily* allowances of 150,000 and 80,000 Dīnnāras mentioned vii. 145 *sqq.*; the assignment of 96,00,00,000 Dīnnāras to the faithful Ekāṅgas, vii. 163; the estimate of a single jewel at 700,000 Dīnnāras, vii. 418; the ransom of "thirty-six lakhs" paid for a court favourite at a time of financial pressure, viii. 1918, etc.

4. The indications thus furnished by the Chronicle are by themselves not sufficient to give any distinct idea as to the ancient monetary system of Kāśmīr.

But fortunately we are able to supplement and elucidate them by the evidence of the coins, and by the short but very valuable account which ABŪ-L-FAẒL has left us of the Kāsmīr currency in the time of Akbar.⁸ His description of the system is as follows: "*Rab Sāsnu* is a silver coin of 9 *mūshas*. The *Pancūhū* is of copper, equal to the fourth of a *dām*,⁹ and is called *kastra*.¹⁰ One fourth of this is the *bārakānī*,¹¹ of which again one fourth is called *shakrī*."

$$\begin{aligned} 4 \text{ kastras} &= 1 \text{ hat.} \\ 40 \text{ kastras} &= 1 \text{ sāsnu.} \\ 1\frac{1}{2} \text{ sāsnu} &= 1 \text{ sikkā.} \\ 100 \text{ sāsnu} &= 1 \text{ lakh.} \end{aligned}$$

which, according to the imperial estimate, is equal to one thousand *dāms*."

5. The merit of having first recognised the value of this account, and explained its true bearing on Kāsmīr numismatics, belongs to General Sir A. CUNNINGHAM. He

⁸ I have followed, in the above extract, the text of the *Āin-i Akbarī*, as found in Prof. Blochmann's edition, ii., p. 564. The translation published by Col. Jarrett, ii., p. 354, deviates from this text by substituting certain "corrections" for the Kāsmīr coin names, and by equating 100 Sikkas to 1 Lakh, which throws the whole reckoning out of order. The *rāhat* of the translation (for *hat*) originates from a wrong division of *كسيرة*, *كوبند* *هت*.

⁹ Forty *dāms* were in Akbar's time equivalent to one rupee; see PRINSEP, *Useful Tables*, p. 21; also THOMAS, *Pathān Kings of Delhi*, pp. 407, 421.

¹⁰ The term *Kastra* is at present unknown as a monetary term in Kāsmīr. The glossator of MS. ۛ in Prof. Blochmann's edition, makes it the equivalent of one-fourth of a *fulūs* or copper. From verbal information I gather that *Kasīra* is still used in the Western Panjāb as a designation of one-fourth of a British Pice. I am unable to trace the term in the works of reference accessible to me at present.

¹¹ Col. Jarrett proposes to read this name in its Kś. form as "*bahyagnī*," recte *bāh^agañⁱ*.

has discussed it at length in his *Coins of Medieval India*.¹² He realised the plain decimal basis of the system described by Abū-l-Faḡl, notwithstanding the defective forms in which the names of the several coins are recorded. He also found the links which connect this system with the extant coinage of the Hindu kings of Kaśmīr.

Owing, however, to a certain want of arrangement and to inaccuracies of detail easily accounted for by the circumstances mentioned in the note, General Cunningham's exposition of the subject is scarcely as convincing as it might be otherwise. In giving an analysis of his results, as far as they affect the object of our inquiry, I shall restrict myself to the points which appear to me established for certain. But I shall add the philological evidence which helps to support those conclusions.

The numerical relation indicated by Abū-l-Faḡl between the *Pancūhū*, *Hat*, and *Sāsnū*, 1 : 4 : 40, makes it quite certain that General Cunningham was right in connecting these terms with the modern Kaśmīrī words for 25, 100,

¹² The work was published after the death of its distinguished author (1894), and was evidently prepared during the last years of his long life. Considering this circumstance and the deficient information possessed by him as regards the earlier sources of Kaśmīr history, Gen. CUNNINGHAM'S account of the monetary system of Kaśmīr as given there, pp. 30 *sqq.*, deserves every commendation. It serves to illustrate that remarkable combination of natural acumen and extensive antiquarian experience which enabled Gen. Cunningham to find often, as it were intuitively, the true solution of a difficult question, even where his evidence was defective and his arguments shaky. It would serve no useful purpose to review here the few references which Gen. Cunningham makes to Kalhaṇa's notices of coins and money, pp. 34 *sq.* It is evident that their true significance had escaped him owing to the defects of the text or translation he used.

and 1,000.¹³ The Kāsmīrī terms intended by Abū-l-Faẓl are in fact *pūntshu*, *hāth*, and *sāsūn*. We shall see below that all these still survive in popular use to the present day as designations of monetary values. *Pūntshu* is clearly a derivative of *pūnts^ah*, "twenty-five" (Skr. *pañcarīṃśatī*); *hāth* (Skr. *śata*) is identical with the ordinary Kś. word for "hundred"; and *sāsūn* is plainly derived from *sās*, "thousand" (Skr. *sahasra*).¹⁴

The coin or value meant by the *hat* was equivalent to 1 Dām of Akbar, or $\frac{1}{8}$ Rupee, as shown by the equation of 1 Pūntshu = $\frac{1}{4}$ Dām. The Pūntshu itself was a copper coin, and, according to the accepted value of the Dām of Akbar (323·5 grains; for references see note 9), may have weighed about 81 grains.

6. Descending below the Pūntshu or "Twenty-fiver," we find in Abū-l-Faẓl's table the *bārakānī*, as the edition reads. This is described in the translation as one-fourth of the Pūntshu, but it is easy to show that General Cunningham was right in treating this coin or value as representing one-half of the former.¹⁵ The *bārakānī* of the edition is, as already correctly recognised in the transla-

¹³ It may be noted that the connection of Abū-l-Faẓl's *sāsūn* with Kś. *sās*, "thousand," and of *hat* with *hāth*, "hundred," is already alluded to in the brief note which Col. Jarrett gives on the passage, from information supplied by Paṇḍit Rādhākīṣan, late Governor of Jammu. But I have no doubt that Gen. Cunningham, whose study of Kāsmīr coinage extended over more than half a century, and who possessed some knowledge of the Kāsmīrī language, had ascertained the true meaning of the terms long before the publication of this note.

¹⁴ *Panchi*, as Gen. Cunningham writes for Abū-l-Faẓl's *pañcān*, is not a form known to Kāsmīrī.

¹⁵ Gen. Cunningham retains throughout the form *bārakkānī*, probably on account of the apparent resemblance between *bārak* and Hindī *bārān*, "twelve." But *bārak* is an impossible form in Kāsmīrī.

tion, nothing but a wrongly spelt form of the Ks. *bāh^agañⁱ*. This term, in the popular reckoning to be described below, represents one-half of the Pūntshu. The clerical error is easily accounted for by the peculiarities of the Persian characters (بارد کانی misread into باره گنی).

Bāh^agañⁱ undoubtedly contains in its first part the Ks. numeral *bāh*, "twelve" (Skr. *dvādaśa*), and may thus rightly be rendered with General Cunningham by "Twelver." That this numerical value of the term *Bāh^agañⁱ* was actually understood in or before the seventeenth century, is shown by the gloss of A₂ on Rājat. v. 117. This gives the word *bāhaganye* as the Ks. equivalent of "twelve Dīnnāras," and accordingly renders the thirty-six Dīnnāras of the text by "three *Bāhaganye*." ¹⁶ It should be noted that Abū-l-Faẓl does not speak of the *Bāh^agañⁱ* as a coin being in actual use. This can still less be assumed of a further sub-division, the *shakrī*, which is described as one-fourth of the *Bāh^agañⁱ*. I am not able to trace a corresponding term in the modern system of reckoning, but have indicated below (§ 11, Note 30) what may be its Skr. equivalent in the monetary terminology of the Lokaprakāśa.

7. Turning now to the higher monetary values, we have the *hāth* or "Hundreder," which was equal, as we have seen, to the copper Dām of Akbar. The *sāsūn* or "Thousander," was the equivalent of 10 Hāths, and must hence be reckoned as 10 Dāms, or one-fourth of a Rupee of Akbar. The *lakh*, as its name shows, was equal to 100 Sāsūns, and accordingly represented the value of 1,000 Dāms, exactly as Abū-l-Faẓl's final remark puts it.

The *Sikka*, which is mentioned as = $1\frac{1}{2}$ Sāsūns, stands

¹⁶ *dvādaśadīnnārāṇāṃ bāhaganye iti kuśmīrudeśabhidhāyā, pariganane śaṭtriṃśaddīnnārāḥ tribāhaganya iti jñeyāḥ.*

apart from this purely decimal scale of monetary values. We receive no indication as to the particular coin, if any, which may be intended by this term. The latter means simply "coin," and was one of the designations applied to the silver coins of the Delhi kings, approximating the standard of 175 grains troy, which was subsequently adopted by Akbar as the standard for his Rupee.¹⁷

As $1\frac{1}{2}$ Sāsūns were equal only to 15 Dāms it is clear that Abū-l-Faḥl in our passage cannot mean Akbar's Rupee of 40 Dāms. The reading *tanka*, which one of Prof. Blochmann's MSS. offers for the word *sikka*, does not help us to clear the point, as its application is equally general. Fortunately, the question as to the real character of the coin, or monetary value, intended by Abū-l-Faḥl's "Sikka," does not affect the general basis of calculation. It can hence safely be left unconsidered here.¹⁸

Omitting this doubtful reference to the Sikka, and the equally irrelevant *Shakrī*, Abū-l-Faḥl's account shows the Kāsmīr currency system of Akbar's time correctly as follows:—

2 Bah ^{ga} nī	= 1 Pūntshn, or "Twenty-five."
4 Pūntshn	= 1 Hāth, or "Hundred."
10 Hāth	= 1 Sāsūn, or "Thousand."
100 Sāsūn	= 1 Lakh.

8. It is a striking illustration of the tenacity with which tradition and custom have maintained themselves in Kāsmīr, that, with but one exception, all the above

¹⁷ Compare PRINSEP, *Useful Tables*, pp. 19 sq., and YULE, *Cathay*, i., p. cexlvii., where the curious history of the word Sikka (the Zecchino of Europe) is traced with much learning.

¹⁸ General Cunningham has assumed that $1\frac{1}{2}$ Sāsūns made up a "Rop Sāsūn," called also Sikka, and had endeavoured to reconstruct on this basis the old silver coinage of the Hindu Kings; see below, note 41.

monetary terms have survived to this day in the popular system of reckoning. Yet we know that the currency of the country has undergone repeated changes since Akbar's time. In this popular system of calculation, with which I acquainted myself by repeated inquiries both among the Sarāfs of the city and among villagers, the term of *hāth* is used for a copper coin corresponding in value to the British pice. Ten coppers or pices are reckoned as one *sāsūn*. The *puntshu* represents one-fourth of the *hāth*, and the *bah^agañⁱ* one-eighth of it.

As long as small shells or cowries were also used for fractional payments, sixteen of these were reckoned to the *Pūntshu* and eight to the *Bāh^agañⁱ*. But as cowries have practically disappeared from the Kāśmīr markets since the early part of Mahārāja Raṇbīr Singh's reign, the above equation is remembered now only by persons above middle age.¹⁹ The use of the terms *hāth* and *sāsūn* is now also likely to disappear soon since the introduction of British coin as the sole legal tender (1898) has supplied a fixed unit of currency in place of the varying currencies hitherto employed (Khām or Harisinghī, "Chilkī," and British or "Double" Rupees).

9. The monetary terms of Akbar's time can thus still be traced in current popular use. But we note a considerable debasement in the values denoted by them. Whereas in Abū-l-Faẓl's time *Hāth* was the designation of a coin equivalent to the Dām or $\frac{1}{16}$ Rupee, it now is used for the copper Pice or $\frac{1}{4}$ part of a Rupee. Following the same ratio the *Sāsūn* has come to represent $\frac{1}{2}$ of the Rupee or $2\frac{1}{2}$ Annas, instead of $\frac{1}{2}$ or 4 Annas. We see thus that the retention of old monetary terms has, in

¹⁹ Paṇḍit Īśvarakaula, in his *Kāśmīreśvarakośa*, renders *bahagañ* correctly *aṣṭau varāṭakāḥ* (8 cowries), and *Pūntshu* by *ṣoḍaśakapardikāḥ* (16 cowries).

Kāśmīr, as elsewhere in India, been compatible with considerable changes in the value and tokens of the currency.

It is necessary to call special attention to this point. For the testimony of the passages of the Rājatarāṅgiṇī and the latter Chronicles incontestably shows that the monetary terms and the system of reckoning which we have traced from Akbar's time to the present day, were already in use in Kalhaṇa's time and probably centuries earlier. In the *pañcaviṃśati*, *śata*, *sahasra* and *lakṣa*, which we meet there so often in statements of money, with or without the addition of the word *dīnnāra*, it is easy to recognise the Pūntshu, Hāth, Sāsūn, and Lakh of Abū-l-Faẓl and the modern Sarāf. The passages showing sums calculated in those terms are given below.²⁰ Besides the latter we find also the term *Koṭi* or Crore, corresponding to one hundred Lakhs (10,000,000 Dīnnāras).²¹ In one passage, v. 117, the mention of 36 Dīnnāras is clearly intended, as the gloss of A, already quoted

²⁰ The *Pañcaviṃśatika*, or "Twenty-five," is distinctly referred to, *Śrīv.*, iii., 314, as an old copper coin, which Ḥasan Shāh (A.D. 1472-84) re-issued in a debased form owing to financial pressure; see also *Śrīv.*, iv., 584. In *Rājat.*, v., 71; viii., 187, fifty Dīnnāras are spoken of, evidently as the equivalent of two Pūntshus.

Sums of *Śata*, or round hundreds, i.e., Hāths, are mentioned, *Rājat.*, v., 116; vii., 1220; viii., 186-143 (in eight items of the Baniā's account already referred to); *Śrīv.*, i., 202.

For *Sahasras* or Sāsūns compare *Rājat.*, iv., 698; v., 71 (*daśaśati*), 205; vi., 88; vii., 146; *Śrīv.*, i., 202; Fourth Chron., 347 (*sahasradaśabhir niṣkañ*).

For sums estimated in *lakṣas* or lakhs, see *Rājat.*, iv., 495 (one "Lakh" daily pay); vii., 145, 414 (seven "Lakhs" paid for a jewel), 1118 (a "Lakh in gold"; see below, para. 14); viii., 124, 1918.

²¹ Also Kṣemendra uses the term in this specific sense, *Samayamātrkā*, viii., pp. 88 sq. See *Rājat.*, iv., 495, 617 (one hundred Koṭis in copper coin); vii., 112, 115, 163 (ninety-six Koṭis as an endowment); *Jonar.*, 588, 977; Fourth Chron., 371 (*niṣkakoti*).

shows, to represent the round sum of 3 Bāh^agañⁱ or 3 *Drādaśa*. The earliest reign in which Kalhaṇa takes occasion to indicate a sum by one of the terms here specified is that of Jayāpīḍa, falling within the second half of the eighth century.²²

10. The same system of money reckoning which we have now traced in the *Rājatarāṅgiṇī* and the later Chronicles, is amply illustrated also by that curious Kośa known as Kṣemendra's *Lokaprakāśa*. The authorship of Kṣemendra (middle of the eleventh century) can be admitted only for a very small portion of the work, and additions to it have been made as late as the time of the Emperor *Shāh Jahān*. But it is certain that it has preserved for us a great deal of what belongs to the genuine old tradition of Kāśmīr in matters of official terms, formulas and the like.²³

In the second *Prakāśa* of this text we have a large number of forms for commercial contracts, bonds, official orders, etc., all drawn up in a queer Sanskrit jargon. This, I believe, represents the medium of correspondence used by the official classes of Kāśmīr during the last centuries of Hindu rule and the period immediately following. In these forms the use of the word *dinnāra* in the general sense of "money," "cash," is extremely common. Sums of money are regularly expressed by the word *dinnāra*. This is prefixed either fully or in the abbreviated form *ḍi* to the amounts which are ordinarily stated in round hundreds, thousands, and lakhs.

The true meaning of the term *dinnāra* is brought out

²² Compare *Raj.*, iv., 495.

²³ Prof. A. WERER has recently published in his *Indische Studien*, xviii., pp. 289-412, valuable excerpts from the work, which will greatly facilitate reference to it until a critical edition can be attempted.

prominently by passages where it is used in evident contrast to *dhānya*. Grain, in particular rice, has formed practically to the present day a regular medium of currency in Kāsmīr, as will be seen from the remarks in the concluding portion of this note (§ 35). It is, therefore, characteristic that we find *dinnārojjāmacīrikā* side by side with *dhānyojjāmacīrikā*, the first term denoting a "bond of debt for cash," the other one for grain.²⁴ Similarly the list of *huṇḍikās* or letters of exchange (the modern *Huṇḍī*) opens with *dinnārahūṇḍikā* and *dhānyahūṇḍikā*.²⁵ Thus, too, we have in the form of a supply contract the payment of 95,000 *Dinnāras* figuring by the side of 6,000 *Khāris* of rice.²⁶ Not less characteristic is the *dinnārahāri* mentioned in another contract. It corresponds exactly to the "Kharwār" in money,²⁷ in which Abū-l-Faḍl estimates part of the Kāsmīr land revenue.²⁸

It is unnecessary to enumerate here all the numerous passages of the *Lokaprakāśa* in which sums of money, or the interest payable on them, are indicated in the manner above described. It will suffice to refer here to the quotations given in the extracts of Professor Weber and to the formula of a contract which has been reproduced below as a typical example.²⁹ The amounts stated range, just as

²⁴ See *Lokapr.*, ii.; *Ind. Stud.*, xviii., p. 339; for *ujjāma* comp. my note, *Rājat.*, viii., 147.

²⁵ See *loc. cit.*

²⁶ *Lokapr.*, iii.; *Ind. Stud.*, xviii., p. 378.

²⁷ Compare my note *Rājat.*, v. 71.

²⁸ See below, § 30.

²⁹ The form of a debt acknowledgment in *Lokapr.*, ii., runs as follows: *deyaṁ śrī prāpte sati viṣaye Jayavaneya (the modern Zeval) dām[ara] amukenāmukaputrena kuṁ vā neṣāne sati dharmataḥ dinnārasahasradaśake aṁke dī 10,000 etc dinārā adyārabhya samvatsaram tāvāt prāptalābhāt dī[nudra] sahasra ekam nyāyaprayaparihāre sati ruddhā nibandham nyāyatāṇḍatayā (?) yasya hasteyam huṇḍikā tasyaivam.* For a similar *huṇḍikā* form, see *Ind. Stud.*, xviii., p. 342.

we have found in the case of the Chronicle, from very small figures (*dīnnāraṣaṭka*, i.e., half a Bāh^agañ') to lakhs.³⁰ The information which may possibly be derived from the Lokaprakāśa's figures as to prices of articles and the relation of metals, will be discussed below.

The successive additions which the text has received make it impossible to fix with certainty the date to which particular portions of the text must be ascribed; but it is this particular circumstance which makes the Lokaprakāśa's evidence so valuable for our enquiry. It must be assumed that the work had remained for centuries in uninterrupted use as a practical manual. It does not show a trace of any other system of reckoning, and thus clearly proves that the identical system of account continued from the time of Hindu rule well into the seventeenth century. Its evidence hence fully confirms and explains the agreement we have traced above between Abū-l-Faḍl's notice and the data of the Rājatarāṅgiṇī.

11. This agreement alone, however, cannot suffice to give us a correct view of the condition of the Kāśmīr monetary system for the periods embraced by Kalhaṇa's narrative. We have already had occasion to note that whereas the terms of currency recorded by Abū-l-Faḍl have continued in use to the present day, the monetary values designated by them have undergone a very considerable change during the three intervening centuries. This fact, as well as the inference to be drawn from similar changes in the history of other currencies in India and Europe, shows that it would not be safe to assume that the Śatas, Sahasras, and Lakṣas in Kalhaṇa's time and

³⁰ Could this *ṣaṭka* be the origin of Abū-l-Faḍl's *shakrī*, which we have found above as a subdivision of the Bāh^agañ'? Skr. *ṣ* often appears as *r* in Kś.; see my note, *Rājat.*, iii., 11.

earlier, necessarily represented monetary values equivalent to those known by the same names in the Kāsmīr of Akbar's reign. The question thus raised is manifestly one of considerable interest and importance for the history of the economical conditions of old Kāsmīr. In order to throw some light on it, we must turn to the coins themselves as our only available witnesses.

The Hindu coinage of Kāsmīr has been fully treated by Gen. Sir A. CUNNINGHAM in his posthumous work already quoted. It is remarkable for having retained the same coin-type during the whole of its history. This, in the coins extant and known, can be followed for at least eight centuries. If we go back to the coinage of the Indo-Scythian rulers from which this type—the standing king and the sitting goddess—was originally copied, the coin-type of Kāsmīr may be said to have remained unchanged for upwards of twelve centuries.³¹ Parallel with this uniformity of type we notice also a great constancy in the matter of metal and weight. From Śaṅkaravarman (A.D. 883-902) onwards we have a long and uniform series of coins which illustrates almost without a break the whole succession of kings down to the end of the twelfth century. This period practically coincides with the one to which Kalhana's monetary notices refer. We have thus ample materials for a comparison of the latter with the extant coinage.

12. The coinage with which we are here concerned, consists almost exclusively of copper. The vast majority of the coins range in weight from 85 to 95 grains each, the average weight, as ascertained by General Cunningham from thirty well-preserved specimens of twenty-nine

³¹ See CUNNINGHAM, *Coins of Med. India*, p. 87.

different rulers, being 91 grains.³² Copper coins of this description are found of most of the kings in considerable quantities, the issues of Śaṅkaravarman, Kṣemagupta, Diddā, and her successors being in particular still extremely common. (For specimens of Śaṅkaravarman's and Harṣa's copper coins, see figs. 1, 2, Plate X.) The above estimate of their average weight can thus be accepted with full confidence. There can scarcely be any doubt that General Cunningham was right in taking these coins to correspond to the Pūntshu or Kasīra of Abū-l-Faẓl's account.

As the Pūntshu was valued according to the latter at a quarter of a Dām, and as the intentional weight of Akbar's Dām is known to have been 323.5 grains copper,³³ we should expect a coin of about 81 grains. To this the copper coins of the Muhammadan Kings of Kaśmīr, with an average weight of 83 grains,³⁴ approach so closely that their identity with the Kasīras or Pūntshus cannot be doubted. It is equally clear that the reduced weight of these Muhammadan coins, as compared with the Hindu copper coins of 91 grains which they succeeded, is due to a gradual course of debasement, so common in Indian numismatic history. For this the disturbed condition of the country during the century preceding the Mughal conquest offers a sufficient explanation.

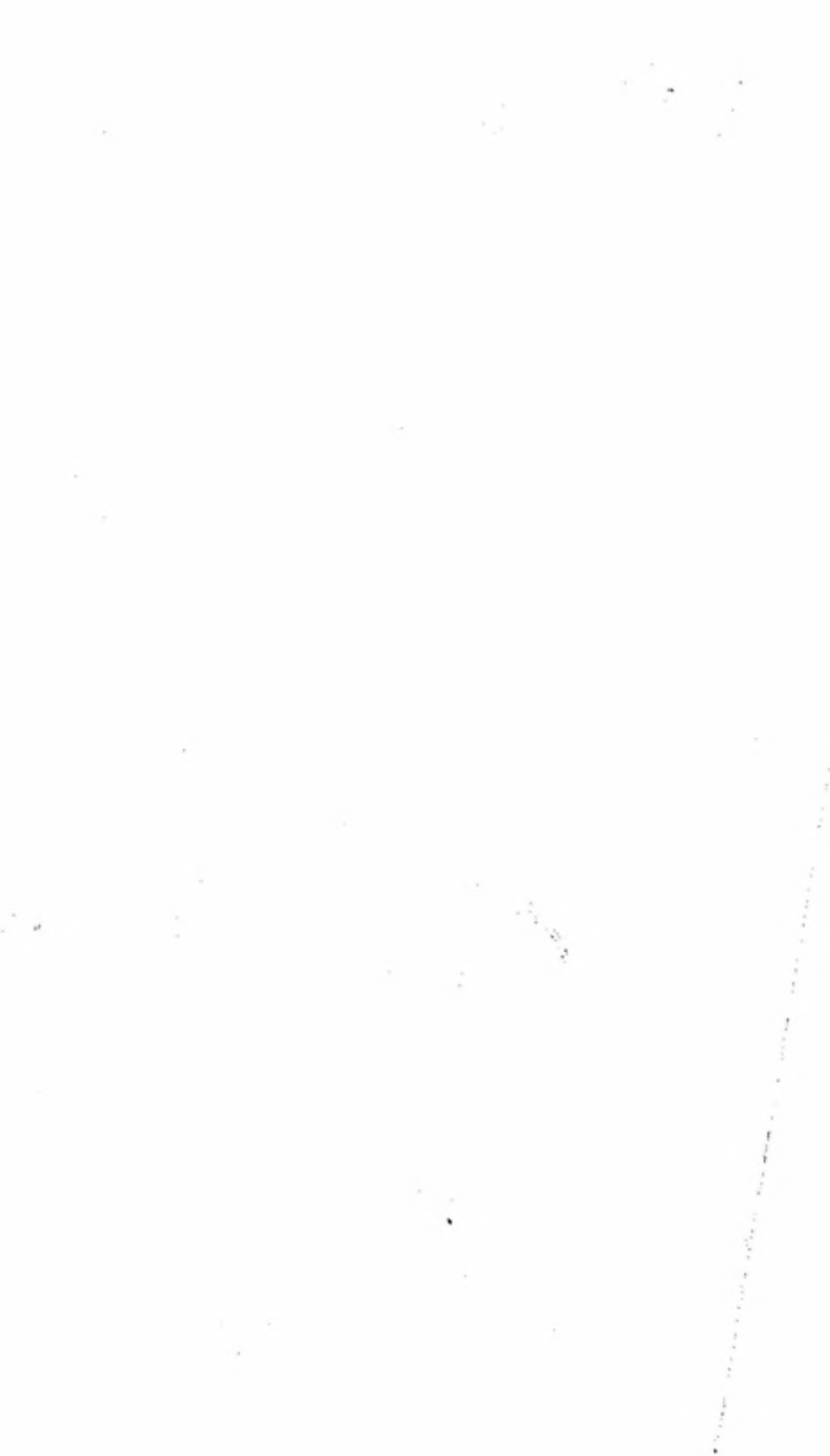
³² See *Coins of Med. India*, p. 32. Gen. Cunningham's table of kings from Śaṅkaravarman onwards, pp. 45 *sq.*, shows thirty names of kings. But it erroneously distinguishes two Jayasimhas (I. and II.), whereas the Chronicles know only one ruler of that name. The number is thus reduced to twenty-nine. It may be noted here that the coin at the head of the table (Plate IV. 1) which is ascribed to an "Ādityavarman" (probably meant for Avantivarman), belongs in reality to Nirjitavarman.

³³ See E. THOMAS's note in PRINSEP, *Useful Tables*, p. 21; also *Pathān Kings of Delhi*, p. 407.

³⁴ Compare *Coins of Med. Ind.*, p. 32.



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Of this process of deterioration in the copper currency of the country we have in fact a distinct record in a passage of Śrivarā's Chronicle, iii. 214. This relates that in the reign of Ḥasan Shāh (A.D. 1472-84) "owing to the exhausted state of the treasury the old copper *Pañcaviṃśatika* was somewhat reduced [in weight]." It may safely be assumed that this expedient had recommended itself already to more than one of the earlier rulers to whose financial straits Kalhana's narrative and the later Chronicles bear such eloquent testimony.³⁵

If then these Hindu copper coins of 91 grains average weight represent the old "Twenty-five" or Pūntshu, referred to in the last quoted passage, we must with General Cunningham recognise Bāh^agañ's in the rare half coins of Kṣemagupta weighing 45 grains each (see Fig. 3).

13. By the side of the very great quantities of later Hindu copper coins which are still to be met with in Kāsmīr,³⁶ it is strange to note the extreme rareness of silver coins of the same period. General Cunningham possessed only a single silver coin struck by King Harṣa, and showing that particular coin-type (elephant to r., *Obv.*), which we know from the Rājatarāṅgiṇī, vii. 926, to have been copied from the coinage of Karṇāṭa (see Fig. 6)³⁷. I myself have, notwithstanding a prolonged

³⁵ Already Harṣa had been forced to proceed to the far more radical expedient of breaking up and melting down divine images; see vii., 1091 *sqq.*, 1844.—Shahābuddīn (A.D. 1355-1373) was advised to coin money out of the copper statues of Vijayeśvara and the "Bṛhadbuddha"; see *Jonar.*, 427 *sqq.*

³⁶ The copper coins of Diddā, Saṁgrāmadeva, Ananta, and Harṣa (the latter often more resembling brass) are so common in the Bazars that they might be supposed never to have quite gone out of circulation.

³⁷ See *Coins of Med. India*, Plate V. 22. In the list given,

search, failed to obtain in Kaśmīr any silver coin of the later Hindu period. I believe, General Cunningham was justified in assuming that this unique silver coin of Harṣa which weighs 23·5 grains was intended to represent 5 Hāths, "five Hundreds," or a half Sāsūn.

To "one hundred Dīnnūras" or one Hāth would correspond four Pañcaviṃśatikas or $91 \times 4 = 364$ grains copper. If we take the relative value of copper to silver as 72·7 to 1, as calculated by Mr. Thomas,³⁸ and accordingly divide 364 by 72·7, we obtain the result of almost exactly 5 grains silver to 1 Hāth. Allowing for loss by wear and similar possible causes, we find that the calculated weight of 25 grains silver for five Hāths is closely approached by the actual weight of Harṣa's coin.

HARṢA is also the only Kaśmīr King of whom real gold coins have yet come to light.³⁹ The two coins described by General Cunningham weigh 72 and 73 grains (see Figs. 4 and 5). As the exact relative values of gold and silver in Kaśmīr for the time of Harṣa are not known,⁴⁰ it is impossible to say with any certainty what amount in the ordinary currency of the country this coin was intended to represent. General Cunningham assuming a

p. 46, Fig. 22 should be described as *R.*, weight 23·5 grains, and Fig. 23 as *N.*, weight 72 grains.

³⁸ Compare *Useful Tables*, p. 21, note.

³⁹ The coins of the earlier Kārkoṭa dynasty, which in Cunningham's tables figure as *N.*, are, in reality, coins of mixed metal; see below, para. 16. I possess a gold coin with the name of Queen Diddā; but I suspect that it is a modern forgery cast from one of Diddā's ordinary copper coins.

⁴⁰ The lucid explanations of Sir H. YULE, *Cathay*, pp. 442, ccl, show the difficulties in the way of any safe estimate of these exchange rates in mediæval India. The relation between the two metals was subject to considerable fluctuations and is likely to have varied also locally in secluded regions like Kaśmīr.

ratio of 8 : 1 between gold and silver, thought that Harṣa's gold coin was intended for one-half of a gold piece representing 25 Sāsūns. The assumptions regarding the silver value of a Sāsūn, from which he proceeded in his calculations, do not appear to be well founded.⁴¹ But it must be allowed that the estimate itself is possibly correct.

⁴¹ Gen. Cunningham, *Coins of Med. India*, pp. 82 sq., reconstructs the system of Kāsmīr silver coinage on the basis of the assumption that Abū-l-Faḍl knows of a "Rop Sāsūn" equal to $1\frac{1}{4}$ Sāsūns, and valued at 15 Dāms. He thus arrives at a "Rop Sāsūn" of 67.25 grains silver. But no such Kāsmīr coin has yet been found, and we have seen already that Abū-l-Faḍl does not give the supposed equation.

All we know of the "Rop (text *Rab*) Sāsūn" is that it was a silver coin of 9 māshas (see above, § 4). Immediately previously Abū-l-Faḍl speaks of the weights used in Kāsmīr, one Tōla in that country being = 16 māshas, and each māsha = 6 Srakhs or Ratis. We may assume that the 9 Māshas in the "Rop Sāsūn" were of the Kāsmīr weight, as the context would lead us to suppose, and not the ordinary Indian Māshas of which 12 (of 8 Ratis each) go to the Tōla. In this case it appears very probable that we have specimens of the "Rop Sāsūn" in the silver coins of the Muhammadan kings which, according to Gen. Cunningham (*Coins of Med. India*, p. 92), are of an average of 94 grains. We do not know the exact weight of the Kāsmīr Tōla. If we assume that it had the present weight of 180 grains, the 9 Kāsmīr Māshas of the "Rop Sāsūn" would be equal to 101 grains. The deficiency of the actual Muhammadan silver coins of 94 grains as compared with this supposed standard of weight, is scarcely greater than the loss which the Rupee suffered in the course of its deterioration during the eighteenth century (compare *Useful Tables*, p. 24 sqq.). Some percentage must also be allowed for loss by wear.

If the "Rop Sāsūn" was originally a coin of about 101 grains silver, it must have been intended for a double Sāsūn, or 2,000 Dinnāras. For we have found above, § 13, with reference to Harṣa's silver coin, that the Hāth, or 100 Dinnāras, must be estimated at 5 grains silver, and the half Sāsūn, or 500 Dinnāras, at 25 grains silver. This gives us, for the Double Sāsūn, $25 \times 4 = 100$ grains silver, i.e., almost exactly the weight we have calculated for the "Rop Sāsūn."

With regard to what has been said as to the deficiency in the weight of the actual coins, it is certainly curious to note that the

We arrive at a similar result if we start from the value of 5 grains silver for the Hāth as above suggested, and assume a ratio of 8·5 : 1 for the relative value of gold to silver. The equivalent of 73 grains of gold would be $73 \times 8\cdot5$ or 620·5 grains silver. This again divided by 5 gives us 124 Hāths or 12,400 Dinnāras, which comes reasonably close to the $12\frac{1}{2}$ Sāsūns of General Cunningham's estimate. It is, however, evident that we cannot go beyond mere conjecture as long as we do not know the real ratio of exchange for the period when the standard of the gold coin was adopted. It must also be remembered that without a larger number of specimens we cannot make sure of the original weight of the coin.

14. The extreme rarity of the silver and gold coins of the later Hindu Kings is in full accord with the very scant notice which Kalhaṇa takes of these metals as means of currency. In the anecdote of Yaśaskara's time, told vi. 45 sqq., we read, it is true, of gold coins (*suvarṇaniṣkas*). But they are brought from abroad as the savings of a Kāśmīrian emigrant and have thus nothing to do with the coinage of the country. The same king when proceeding to a Tirtha in his fatal illness, is said to have left his palace with two and a half thousand pieces of gold bound up in the hem of his dress.⁴² But the expression is so general that it is not even certain whether real coins are meant.

94 grains of the coins I take for Double Sāsūns, contain exactly four times the weight of Harṣa's coin of 23·5 grains. This striking agreement supports our view regarding the intentional values of these two coin-species. I must add that Gen. Cunningham, though, as we have seen, wrong in his assumptions about the "Rop Sāsūn," had correctly recognised a "Double Sāsūn" in the Muhammadan silver coins.

⁴² See *Rājat.*, vi., 102 (*dve sahasre suvarṇasya sārḍhe*).

The only reference to Kāsmīr gold and silver coins is made in the account of Harṣa's reign (A.D. 1089-1101). Under him, Kalhaṇa tells us, "the use of gold and silver money" (*dīnnāra*) "was plentiful in the land, but that of copper money rare."⁴³ The extreme abundance of Harṣa's copper (and brass) coins strangely contrasts with this statement. They are to this day found far more frequently in the Bazars of Kāsmīr and even outside the Valley than the coins of any other Kāsmīr king. On the other hand we find the gold and silver coinage of Harṣa practically represented by unique specimens. It must be taken into account that the verse above quoted follows immediately after a poetically extravagant description of the glories of Harṣa's court. We shall hence scarcely do injustice to the author if we see in the passage nothing but the poetically exaggerated statement that under Harṣa there circulated *also* gold and silver coins besides the ordinary copper currency.

It may be assumed that Kalhaṇa means gold coins of Harṣa when he tells us that this extravagant prince presented "a lakh of money" (*kāñcanadīnnāralakṣa*) to Kanaka, a person of his court, whom he wished to compensate for the trouble he had been put to by taking singing lessons from himself.⁴⁴ But it is difficult to make quite sure of the actual value intended.

If Kalhaṇa means a lakh of gold coins such as we estimated above at 12,500 *Dīnnāras* each, the equivalent of the sum calculated in the ordinary currency, viz., 125,00,00,000 or 125 Crores of *Dīnnāras*, would appear astonishingly large. If, on the other hand, we take Kalhaṇa's

⁴³ See *Rājat.*, vii., 950.

⁴⁴ See *Rājat.*, vii., 1118.

expression to mean "a lakh of Dinnāras (ordinary currency) paid in gold," the amount of the royal present would be reduced to a sum which even under the modest economic conditions of old Kaśmīr could scarcely excite attention on the score of extravagance. As we find Crores of Dinnāras elsewhere mentioned, even in the possession of private individuals,⁴⁵ it appears to me on the whole more probable that in Kalhana's story, whatever its worth, the former amount or one approximately equally large was intended.

15. It must be concluded from these scarce notices that gold and silver cannot have formed in Hindu times an important part of the actual coined currency of Kaśmīr. Yet there are indications that the country, as far as its natural resources admitted, had shared in old days that accumulation of precious metals which has always been so characteristic a feature in the economic history of India. Thus we find a system of gold assay referred to under King Ananta as the means of ascertaining the savings of the people. We see here plainly that in Kaśmīr, too, as in the rest of India, it must have been the common practice to invest savings in gold and silver ornaments.⁴⁶ Of King

⁴⁵ Thus we read, vii. 112, of a certain favourite who, beginning with a cowrie, accumulated crores. 96,00,00,000 Dinnāras are referred to, vii., 163, as an assignment to royal bodyguards. Zain-ul-'ābidīn is said to have presented in a single day ten crores Dinnāras to children; *Jonar.*, 977. For charitable gifts in crores, see also Fourth Chron., 871.

⁴⁶ See *Rājat.*, vii., 211 sq. Compare, for a later period, Śrīvara, iv., 100, where the gold bracelets of persons are mentioned who had not owned a cowrie before.

The description of Harṣa's flight (see vii., 1607, 1621), shows how readily such ornaments could be used as substitutes for money in times of difficulties.

In this connection reference may be made to a curious form

Sussala it is recorded that he transmitted gold ingots to his treasury in the Lohara castle, in order to hoard there the wealth he accumulated by an oppressive fiscal system.⁴⁷

That bullion in some respect took the place of coined silver or gold as a medium of exchange may be inferred also from the manner in which Jonarāja's Chronicle refers to the poll-tax (Jizyah) levied during Muhammadan rule on Brahmans who refused to be converted.⁴⁸ This tax is

for a marriage contract, found in the third book of the Loka-prakāśa. In it the quantity of gold to be given in ornaments for the bride is specified. The passage in its qncer Sanskrit runs thus: "atra alaṅkaraṇād bhartṛpakṣāt sau[varṇa]tolaka-paṇcakaṇi 5 tatpravyād (?) di[nṇāra]sahasracatvāriṃśati veda (for vedam ?) mūle dattaṁ praviṣṭaṁ tathāsmadiyapitṛpakṣāt sau[varṇa]tolakaṁ tatpravye dinnārasahasraṣṭakam caivam ubhayapakṣād di[nṇāra]sahasra aṣṭacatvāriṃśati," etc.

Though I am unable at present to explain some of the terms employed, it is clear that the contract indicates five tōlas weight as the quantity of gold to be given on the part of the bridegroom, and one tōla as that presented by the girl's father. The former quantity is represented as equivalent to 40,000 Dinnāras and the latter accordingly as equal to 8,000 Dinnāras.

It is difficult to see how the relative value here assumed for gold can be made to accord with what we know of the exchange rate for gold, and with the ascertained value of the Kāsmīr currency. Taking 1,000 Dinnāras as equivalent to $\frac{1}{4}$ of a silver rupee or Tōla, we cannot imagine, in the most benighted corner of Asia, a rate of exchange which would have made $8 \times \frac{1}{4}$, or 2 Tōlas silver, equal in value to 1 Tōla gold. The only explanation I can suggest is that the gold which the parties agree to accept is of the poorest description, i.e., silver containing only a small alloy of gold. That it was once the custom in the Valley to use such fictitious "gold" for marriage gifts is asserted by the tradition of my Brahman friends. A trace of it survives in the popular designation of bad gold as *kōr'sun*, "girl's gold."

⁴⁷ See viii., 639.

⁴⁸ See vv. 1077 sq., in the Bombay Ed. of Jonarāja's Chronicle. The Calcutta Ed., which has here an undoubted lacuna, shows a portion of the passage in A. 815.

stated to have been under the earlier Sultāns two *palas* of silver yearly per head. As this weight is equivalent to eight Tōlas, the impost was justly felt as cruelly heavy. Zain-ul-'ābidīn is praised for having reduced it to one *māṣa* per annum.⁴⁹ In contrast to the above passages we meet in the later portion of the Fourth Chronicle with comparatively frequent mention of gold and silver coins.⁵⁰ We may safely take this as an indication of the great change which Akbar's conquest of Kaśmīr and the preceding relations to the Mughal Empire must have effected in the economic and monetary conditions of the Valley.

16. We have been obliged to discuss at some length the coinage of the later Hindu rulers, because it is immediately connected with the monetary system we have to elucidate. But our survey of the available numismatic evidence would not be complete without some reference to the Kaśmīr coins of an earlier period. These coins show the same general type to which we have already referred as characterising the Kaśmīr coinage throughout its existence. Yet they have peculiar features of their own which clearly mark them off from the coinage of Śaṅkaravarman and his successors. For a detailed description of these coins I must refer to General Cunningham's

⁴⁹ Regarding the *pala*, compare note, *Rājat.*, iv., 201-203; for the *māṣa*, see above, § 18, note.

Under the Cakk rulers of the sixteenth century the poll-tax amounted to 40 *paṇas* yearly for each male member of the Brahman community invested with the *yajñopavīta*. Akbar, on conquering the Valley, abolished the tax. For this he is duly praised by the Chronicler; see Fourth Chron., 885 *sqq.* What coin is meant in this passage by the *Paṇa* is not clear. Perhaps the term, which according to the lexicographers signifies a coin = 4 Kāṣiṇis, is here used for the Pāntshu or Kasīra; 40 *Paṇas* would thus make a *Sāsūn*.

⁵⁰ See Fourth Chron., 559, 901 *sq.*, 909.

work, which illustrates the several classes hitherto known.⁵¹ For our purposes a notice of the following points may suffice.

The class of coins which stands nearest in time to those already described, belongs to the dynasty of which Kalhana treats in Book iv., and which is known as that of the KĀRKOṬAS. This class includes coins of seven distinct kings, several of them not known to us from the Chronicle. It is distinguished by a type of bold but rude execution, and the fact that most of the coins are made of mixed metal containing only a small alloy of gold. Whereas certain types are common enough in this mixed metal,⁵² the number of specimens in copper is small. General Cunningham was inclined to treat the latter as simple forgeries that had been originally gilt.⁵³ Good specimens of the mixed-metal coins seem to have an average weight of about 120 grains. The specimens in copper are somewhat lighter, the four described by General Cunningham weighing 101, 93, 110, 118 grains, respectively.

The difference of metal and weight seems to exclude any close and immediate connection between this class of coins and the later coinage. We note the same also as regards the form of the types both on obverse and reverse. Their extremely rude modelling leaves scarcely anything resembling human shape in the figures of the standing king and seated goddess (compare the reproductions of mixed-

⁵¹ See *Coins of Med. India*, p. 42 sq., and Plate IV.

⁵² Such are the coins of *Durlabha*, Kalhana's *Durlabhavar-dhana*, Pl. III. 7; *Pratāpa* or *Pratāpāditya* II. (*Durlabhaka*), Pl. III. 10; *Vinayāditya* or *Jayāpīda*, Pl. III. 14 (compare *Rājat.*, iv., 517). Very common mixed metal coins are those of a king whom Cunningham calls *Vigraha*, but whose name seems to me to read *Viśramśadeva*, Pl. III. 8.

⁵³ See *l. c.*, p. 29.

metal coins of Durlabha[vardhana] and Vinayāditya-Jayāpīḍa in Figs. 7 and 8). That the far better recognisable types on the coins of Śaṁkaravarman and his immediate successors should have been copied from the ungainly caricatures of the Kārkoṭa coins appears to me highly improbable.

In view of these differences, it is impossible to ascertain at present what the relations in regard to monetary value may have been between the Kārkoṭa coinage and that of the later dynasties.

17. Among the coins which General Cunningham shows as anterior to those of the Kārkoṭa kings, there are two, with the names of Narendra⁵⁴ and Gokaṛṇa⁵⁵ (see Figs. 9 and 10). These coins, in type, metal, and general execution, closely attach themselves to the latter class. Of the remaining coins two show the name of *Pravarāsena*. In him we must recognise Pravarasena II. of Kalhana's list, the great conqueror of Kāśmīr tradition and the founder of Śrīnagar.⁵⁶

His coins are of superior execution, and clearly represent a much closer approach to the original type taken from the Indo-Scythian coinage. They are known to us only in gold and silver. His apparently unique silver coin in the British Museum, reproduced in Fig. 11, weighs 120 grains, and may, as suggested by Cunningham,⁵⁷ have been intended for 25 Hāth, or 2,500 Dīnnāras of the later currency. But we must remember that the silver coinage of the later Hindu period is known to us

⁵⁴ See note, *Rājat.*, i., 347. [Mr. Rapson, who has been kind enough to examine the "Narendra" coin at my request, informs me that there is considerable doubt as to the correctness of the reading.]

⁵⁵ See note, *Rājat.*, i., 346.

⁵⁶ See iii., 324 sqq.

⁵⁷ See *Coins of Med. India*, p. 33.

for the present only by a single coin of Harṣa, and that there is a long interval, at least five centuries, between Pravarasena and Harṣa. It would hence be manifestly unsafe to rely on this proposed valuation. The same remark would apply to the gold coin of Pravarasena (Fig. 12), of which, however, no weight-statement is given in General Cunningham's list.

18. Among the earlier coins which can be safely attributed to Kāsmīr, there is one class which pre-eminently deserves our attention in connection with this inquiry. I mean the copper coins bearing the name *Toramāṇa* which are found to this day in remarkable quantities all over Kāsmīr and the neighbouring regions.⁵⁸ The interest which these coins can claim from us is due to two reasons. In the first place we have in the *Rājatarāṅgiṇī* an important passage which distinctly mentions these coins and connects them with a curious historical tradition. Secondly, it is certain from a comparison of the types that the coins bearing the name of *Toramāṇa* have been the direct models for the later copper coinage of Kāsmīr. Hence a closer relation between them seems probable also in regard of monetary value.

The copper coins with *Toramāṇa*'s name are found in several varieties, which show differences both in the characters of the legend and in execution, though the general type is preserved throughout. This fact, in combination with the great abundance of these coins, suggests that they may have been struck during a prolonged period. The coin reproduced in Fig. 13 represents the best-executed and probably earliest variety, and may be taken as a good specimen of the original type.

The obverse shows the figure of the standing king

⁵⁸ Compare note, *Rājat.*, iii., 103.

wearing short trousers, which gradually develop into the kilt or fustanella of curiously exaggerated dimensions we see in the later coinage. To the left of the figure is the legend *Śrītoramāṇa* in Brāhmī characters of about the fifth or sixth century. The reverse is occupied by the figure of the seated goddess with the letter *Ki* (*Ke* ?)-*da-ra* written perpendicularly to the left. These letters, which are found in the same peculiar arrangement on the coins of Pravarasena and on all later Kārkoṭa coins, are undoubtedly copied from the coins of the later Kuṣana rulers of Gandhāra. They are usually believed to contain the name of the founder of the kingdom of the Little "Yuetchi," called *Ki-to-lo* in the Chinese Annals.³⁹ With the historical questions which the use of this Kuṣana mint-mark on Kāśmīr coins raises we are not concerned in the present place.

In other and, as I think, later issues of Toramāṇa's coins (see Figs. 14 and 15) the legend of the obverse appears reduced in various fashions to *Śrītora*, *Śrīto*, etc. The characters are bolder but less carefully formed. On the reverse the Kuṣana legend disappears altogether, and the figure of the goddess becomes more and more like the coarse representation found on the later coins. The weight of all specimens seems to range between 100 and 120 grains.

19. The coins just described are the only Kāśmīr coins showing the name of Toramāṇa. It cannot reasonably be doubted that the tradition which Kalhaṇa, iii. 103, records of the coins struck by Toramāṇa, the brother of King Hiranya, must be understood to refer to them.

³⁹ See CUNNINGHAM, *Coins of Med. India*, pp. 27 sqq.; *Later Indo-Scyth.*, pp. 61 sqq., where the coins of Toramāṇa are discussed.

The passage, which is unfortunately very short, and in one word probably corrupt, informs us that "Toramāṇa, suppressing the undue abundance of [coins] struck by put in circulation coins (*ḍinnārāḥ*) struck in his own name."⁶⁰ I have already, in the note appended to the translation, indicated the reasons which make it impossible to give a satisfactory interpretation of the word *balā-*, left here untranslated. The word, as it stands in the text, is unintelligible; it seems to hide a designation of the ruler whose coins Toramāṇa wished to replace in circulation by his own issue. But neither the context nor other information helps us to a satisfactory emendation.

The Chronicle represents Toramāṇa as the younger brother and Yuvarāja of Hiranya. The latter was angered by Toramāṇa's assumption of the royal privilege of coining in his own name, and subsequently imprisoned him. Pravarasena II, Toramāṇa's son, however, ultimately attained the throne. It is unnecessary in the present note to examine this account of Toramāṇa's personality as to its historical truth. Nor need we consider here his suggested identity with Toramāṇa, the King of the White Huns and father of Mibirakula. The questions thus raised have been fully discussed in my introduction to the translation of the Chronicle. But it is important to

⁶⁰ The text of the passage is: *balāhatāndām prācūryam vini-vāryāsamañjasā | Toramāṇena ḍinnārāḥ svāhatāḥ sampravartitāḥ ||*

For Gen. Cunningham's repeated attempts to interpret the passage, see my note, *Rajast.*, iii., 103, and *Later Indo-Scyth.*, p. 62. They are vitiated by his belief that the word *āhata*, "struck," could be connected with the Kś. term *hāth*. We have seen, however, that the latter appears always correctly as *śata* in the text of the Chronicle. It is scarcely necessary to point out that *balā-* (recte *balā-*) in the first word of the verse cannot mean "great king," as CUNNINGHAM, *Later Indo-Scyth.*, p. 63, assumes.

point out that the coins of Toramāṇa, as far as our present knowledge goes, represent the earliest distinct issue of the Kaśmīr mint.⁶¹ It is also worth noting that the traditional account recognised the close connection between Toramāṇa and Pravarasena II, which is so plainly attested by the coins.

20. If the copper pieces of Toramāṇa were the first independent coinage of Kaśmīr, as General Cunningham believed, or at least the commencement of a new system of coinage, it is easy to understand why their issues should have been so abundant, and why they have remained so long in circulation. On the latter point a passage of Śrīvara's Chronicle, iii. 213, furnishes very remarkable evidence. We read there that Sultān Ḥasan Shāh (A.D. 1472—84), finding "that the coins of the illustrious Toramāṇa were no longer circulating, put into circulation a new [coin called] *Dvīdinnārī*, made of lead."⁶² The next verse, which has already been quoted above, § 12, then mentions the fact that the old copper Pañcaviṃśatika or Pūntshu, was by the same ruler somewhat reduced [in weight], owing to the exhausted state of the treasury.

The words of Śrīvara make it perfectly clear that even in the fifteenth century there must have been coins in circulation which were known by the name of *Toramāṇa*. As "the old copper Pañcaviṃśatika," i.e., the ordinary copper piece of the later Hindu and Muhammadan coinage, is separately referred to, it follows that Śrīvara could have meant only the copper coins with

⁶¹ Gen. Cunningham already had clearly realised the numismatic evidence on this point; see *Later Indo-Scyth.*, p. 63.

⁶² The text is: *Śrītoramāṇadīnnārāṇi niṣpracārān avetya ca | dvīdinnārī nāgamayī navā tena pravartitā ||*

Toramāṇa's name as actually known to us. As their weight was different from that of the usual copper coins, it was necessary to distinguish them by a separate designation; for this the name so clearly shown in their legend offered itself most conveniently. We find this conclusion strikingly illustrated by the fact that the Lokaprakāśa, in a miscellaneous list of words, mentions the terms "*toramāṇaḥ*" immediately before *niṣkāḥ* and *dinnārāḥ*.⁶³

21. The fact of a circulation prolonged through at least eight centuries, the actual abundance of the coins and the variety of the dies used for them—all these point to the conclusion that "*Toramāṇas*" were struck not only by the king who bore this name, but by a succession of rulers after him. It is certainly significant that we have no genuine copper coins from certain Kārkoṭa kings like Vinayāditya-Jayāpīḍa, Durlabha, etc., whose mixed-metal coins are common.

May we not reasonably suppose, in explanation of this curious fact, that the copper coinage under this dynasty, which must have ruled for at least two centuries, consisted of pieces of Toramāṇa, supplemented by fresh issues reproducing the original name and coin type more or less successfully? It is impossible now to guess the reason which led to the retention of the earlier copper coins. But it would be easy enough to quote parallel cases from the numismatic history of both Europe and India down to quite modern times.⁶⁴ It must also be noted that in the case of

⁶³ Compare Prof. Weber's abstract, *Ind. Stud.*, xviii., p. 358. The old birch-bark MS. deposited by me in the Imperial Library, Vienna, correctly reads *toramāṇaḥ* instead of *toramā* of the Poona and Berlin MSS.

⁶⁴ Compare, e.g., the continued circulation in the Red Sea Littoral of the Maria Theresia dollars, which, I believe, the Vienna mint used to coin until quite recently. The fact that all

copper money the advantage derived from melting it down is necessarily small. This circumstance has always tended to secure a prolonged circulation to the earlier coinage.⁶⁵

The above assumption may help to explain the reference which Kalhaṇa, iv., 617, makes to the large quantity of copper coins issued by Jayāpīḍa. We read there the story that the king, thanks to the indication of the Nāga of the Mahāpadma lake, found a mine rich in copper. "From this mountain, which was in Kramarājya, he obtained copper sufficient to coin hundred crores less one Dinnāras which bore his name." Jayāpīḍa is then said to have offered to other kings the wager that they should produce a complete hundred of crores. The legendary character of the story, as told in the Chronicle, is evident enough. But it is possible that the tradition of Jayāpīḍa having coined copper money in large quantities had some foundation in facts. In Jonarāja's time the copper mine in Kramarājya seems still to have been known, and to have been popularly connected with Jayāpīḍa's minting operations.⁶⁶ In the note on the passage, I have pointed out that genuine copper coins with Jayāpīḍa's name are unknown. We could, however, account for the tradition if some part of the abundant issues of Toramūṇa coins had to be attributed to him.

22. The average weight of the "Toramūṇas," as we have seen, is considerably in excess of that of the copper pieces of the later Hindu Kings, being about 110 grains

coins which formed the circulation of India in the first third of this century bore the name of Shāh 'Ālam is another striking instance; see PRINSEP, *Useful Tables*, p. 27.

⁶⁵ Compare PRINSEP, *Useful Tables*, p. 38.

⁶⁶ See *Jonar.*, 884.

against the 91 of the latter. It must hence be assumed that, while in circulation by the side of the lighter pieces, they commanded a premium. An exchange of 8 Toramāṇas against 10 Pūntshus would have approximately represented the relation in value. On this point, however, no evidence is available.

General Cunningham was inclined to connect the "Toramāṇas" with "the barbarous pieces of the later Kuṣāna princes," which, he supposes, Toramāṇa had collected and recoined in his own name (for a specimen see Fig. 16). These coins according to him vary in weight from 100 to 125 grains.⁶⁷ On historical grounds this connection appears plausible enough. But I have not been able to find exact statements as to the weight of these Kuṣāna coins.

More important it would be for us to ascertain the cause of the change in weight which attends the new issues of Kāsmīr copper coins from Avantivarman onwards. Our available materials do not permit us to form a final opinion on the point. But judging from whatever indications there are, it appears probable that this change represents only an early step in that course of gradual debasement which we traced above in the history of the later Kāsmīr coinage down to the time of Akbar.

23. If this explanation is correct we must take the Toramāṇa for the Pañcaviṃśatika of the period preceding Avantivarman's accession. We may further conclude that the monetary system of the later Hindu period existed already under the Kārkoṭa dynasty and earlier, but with a somewhat higher intrinsic value. In favour

⁶⁷ See *Later Indo-Scyth.*, p. 63.

of such a view we might refer to two passages of Kalhaṇa's Book iv., where sums of money are specified in terms exactly corresponding to those used in later portions of the narrative. Thus we read, in iv. 495, of Jayāpīḍa's Chief Paṇḍit drawing a daily pay of one lakh Dīnnāras. Again, in iv. 698 *sq.*, we are told that Mamma, one of the regents of the State under Ajitāpīḍa, at the consecration of a temple, presented Brahmans with eighty-five thousand cows (or, we must presume, their equivalent value in money), and gave with each cow 5,000 Dīnnāras as an outfit.

It is evident that such large figures can be understood only on the basis of a currency in which a "Thousander" represented a value not greatly in excess of Abū-l-Faḍl's Sāsūn (one-fourth of a Rupee).

24. A deterioration of the currency such as we are led to assume here, might at least partially be accounted for by the disturbed state of the country during the nominal reigns of the last Kārkoṭa rulers. Kalhaṇa's narrative shows us for more than half a century a succession of puppet-kings, and the division of all royal power between contending court factions. It can scarcely be a mere coincidence that we find the accession of Avantivarman's dynasty (A.D. 855), which closes this period of internal troubles, marked also by a modification in the value of the currency tokens.

25. We have now completed our survey of the coinage of Kāśmīr as far as it can throw light on the old monetary system of the country. It will be useful to summarise here briefly the results of our enquiry concerning this system.

The comparison of Abū-l-Faḍl's account and of the still-surviving tradition with the data of the Rājatarāṅgiṇī

and the later Kāsmīrian texts has shown us that the currency of Kāsmīr, at least from the ninth century onwards, was based on a decimal system of values starting from a very small unit. The values which can be shown to have been actually used in reckoning are given in the following table with their Sanskrit and modern designation:—

12 Dīnnāras	=	1	* <i>Dvādaśa</i> ("Twelver"), <i>Bāh^ayañⁱ</i> .
2 Dvādaśa	=	25 Dīnnāras or 1	<i>Pañcaviṃśatika</i> ("Twenty-five"), <i>Pan-</i> <i>tshu</i> .
4 Pañcaviṃśatika	=	100 Dīnnāras or 1	<i>Śata</i> ("Hun- dred"), <i>Hāth</i> .
10 Śata	=	1,000 Dīnnāras or 1	<i>Sahasra</i> ("Thousander"), <i>Sāsiin</i> .
100 Sahasra	=	100,000 Dīnnāras or 1	<i>Lakṣa</i> ("Lakh").
100 Lakṣa	=	100,00,000 Dīnnāras or 1	<i>Koṭi</i> ("Crore").

In using the designations here indicated it was usual but not necessary to add the word *dīnnāra*, in the general sense of "money" (modern *dyār*), in order to mark their character as monetary terms.

The following table shows the coins which can be assumed to have represented monetary values of the above description at successive periods, together with their metal and weight. The equivalent values for Akbar's time, calculated on Abū-l-Faẓl's estimate, are shown in a separate column.

Value in Dinnāras.	Designation.	Early Hindu Coins (up to A.D. 855).	Later Hindu Coins (from A.D. 855).	Muhammadan Coins.	Equivalent values on Abū-l- Fazl's Estimate.
12	Dvādaśa (Bāh- gañ')	—	Æ 45 grs.	—	$\frac{1}{2}$ Dām or $\frac{1}{16}$ Rupee.
25	Pāncavimsatika (Pūntshu).	Æ 110 grs. (?)	Æ 91 grs.	Æ 83 grs.	$\frac{1}{2}$ Dām or $\frac{1}{16}$ Rupee.
100	Śata (Hāth)	—	—	—	1 Dām or $\frac{1}{16}$ Rupee.
500	—	—	Æ 23.5 grs.	—	5 Dāms or $\frac{1}{4}$ Rupee.
1,000	Sahasra (Sā- sūn)	—	—	—	10 Dāms or $\frac{1}{2}$ Rupee.
2,000	—	—	—	Æ 94 grs.	20 Dāms or $\frac{1}{2}$ Rupee.
2,500	—	Æ 120 grs. (?)	—	—	25 Dāms or $\frac{1}{4}$ Rupee.
12,500	—	—	Æ 73 grs. (?)	—	125 Dāms or $\frac{3}{4}$ Rupee.
100,000	Lakṣa (Lakh)	—	—	—	25 Rupees.
100,00,000	Koṭi (Crore)	—	—	—	2,500 Rupees.

26. The table shows that the only denomination of coins which can be traced throughout is the copper coin representing 25 Dīnnāras. Taking into consideration also the vast preponderance of these coins in quantity, the old currency of Kāsmīr must be described as one in copper.

Abū-l-Faẓl's valuation of 4 Pūntshus or 100 Dīnnāras at $\frac{1}{8}$ Rupee enables us to estimate the intrinsic value of sums expressed in terms of the Kāsmīr currency. But inasmuch as his valuation relates to a debased form of the currency, in which the Pūntshu was represented by a coin of about 81 grains instead of one of circ. 91 grains, an addition of 12 per cent. is required to arrive at a correct estimate of the metal-value of the currency for the period from A.D. 855 to the close of the Hindu rule. A still more considerable addition, circ. 35·8 per cent., would have to be made for the earlier Hindu period in case our suggestion should prove correct that the Toramāṇa coins of circ. 110 grs. represent the Pūntshu of the earlier coinage.

27. The question naturally presents itself as to the unit underlying the system of monetary account here described. The only passage of Kalhaṇa's Chronicle which mentions a single Dīnnāra, unfortunately does not make it quite clear whether a separate monetary token is meant or whether the unit is referred to only as the subdivision of a larger figure convenient for reckoning.⁶⁸

⁶⁸ Kalhaṇa in his account of a famine under Harṣa, vii., 1220, mentions that the Khāri of rice sold for 500 Dīnnāras, and 2 Palas of grapes (mārdvika) for 1 Dīnnāra. The Khāri contains 1,920 Palas (see note, v., 71), and what Kalhaṇa evidently wants to say is that a Khāri of grapes cost 960 Dīnnāras; see below, § 31.

If the Dīnnāra was more than a mere abstract unit of account it could not well have been represented by any other token than the cowrie. For the weight of copper which would correspond to the twenty-fifth part of a Pañcaviṃśatika, viz., $\frac{2}{5}$ or 3·64 grs., is manifestly too small for a real coin. No copper pieces of this diminutive size are ever actually found in Kaśmīr.⁶⁹

That the cowrie was from early times used as a monetary token in Kaśmīr, as elsewhere in India, is amply shown by our texts. Kalhaṇa names, in a characteristic fashion, the lowest and highest monetary values when he speaks of a favourite of King Saṃgrāmadeva who, starting with a cowrie (*varāṭaka*), had amassed crores.⁷⁰ Kṣemendra, who had a keen eye for the small affairs of his own country and time, humorously describes the miserly trader who, in the evening, after plundering his customers, is with difficulty induced to give three cowries to his household.⁷¹ Elsewhere he tells of an equally close-fisted merchant who sends as his contribution to a dinner-party, one Tūla of oil, two of salt, and two cowries for vegetables.⁷² Cowrie and crore are contrasted as above also by Jonarāja, 588, while Śrīvara speaks of soldiers of fortune who before did not own a cowrie and now sport gold bracelets.⁷³

28. We have seen already above that the popular reckoning in Kaśmīr, as surviving to the present day, counts the Bāh^agañī as equal to eight cowries, and the

⁶⁹ The smallest old copper coins of India seem to weigh 9 grains; see CUNNINGHAM, *Coins of Anc. India*, p. 45.

⁷⁰ See vii., 112.

⁷¹ See *Kalāvālāsa*, ii., 5, 7.

⁷² *Samayamātṛkā*, viii., 80 (the word for cowrie is here *śretikā*).

⁷³ *Śrīv.*, iv., 100.

Pūntshu as equal to 16 cowries. As 4 Pūntshus go to the Hāth, which is represented now by the pice or $\frac{1}{4}$ th of a rupee, it follows that $16 \times 4 \times .64$, or 4096 cowries are, or were until quite recently, reckoned in the rupee. In Akbar's time the term Hāth applied, as we have seen, to a copper coin of greater intrinsic value, equivalent to $\frac{1}{4}$ th of a rupee.⁷⁴

The conditions of traffic and freight which practically alone can affect the relative value of these small shells, had in regard to Kāsmīr scarcely altered materially between the Mughal period and the early part of this century. We may reasonably assume that the relation between silver and cowries in Kāsmīr was then approximately the same as in recent times. Dividing, accordingly, 4,096 by 40, we obtain 102.4 cowries to the Hāth, or "Hundreder" of Abū-l-Faẓl. This result comes so strikingly close to the one we must expect if the unit of the Kāsmīr monetary system was in reality the cowrie, that it seems to me to give considerable weight to the above explanation.

It might be objected that as the copper coins of the later Hindu Kings were, by some 12 per cent., heavier than those upon which Abū-l-Faẓl's estimate is based, they could be supposed—*ceteris paribus*—to have represented a proportionately greater number of cowries. As a set-off against this, however, we may point to the undoubted change which the Muhammadan conquest must have brought about in the conditions of trade and traffic from India to Kāsmīr. In Hindu times the

⁷⁴ The very slight difference in pure silver weight between Akbar's Rupee and the present standard of the British Rupee can safely be ignored here.

country was jealously guarded against all foreigners, in particular those coming from the south, as Albērunī's account clearly shows us.⁷⁵ The facilities of commerce with India proper, from where alone the cowries could be supplied, must necessarily have been far more restricted than in the succeeding epoch. We could thus readily understand that, whereas at the earlier period a coin of 91 or even more grains copper was the equivalent of 100 cowries, the same quantity of shells could subsequently be obtained for 83 or 81 grains.⁷⁶

29. The facts I have indicated create a strong presumption that the unit of the Kaśmīr monetary system was originally the cowrie. But it must be owned that the data at present available do not permit us to settle this point with absolute certainty. Irrespective, however, of any view which we shall ultimately have to take of this question, it is certain that the unit of the Kaśmīr currency was an exceptionally small one. This fact alone is of considerable interest for the study of the old economic conditions of the country. But it is even more important for this purpose that we are now able to estimate with approximate accuracy the real value of the prices, salaries, etc., which we find recorded in Kalhana's work and the later Chronicles. As a com-

⁷⁵ See *India*, i., p. 206.

⁷⁶ It would, in fact, seem worth considering whether the debasement of the Kaśmīr copper coinage we have traced above was not, to some extent, caused or facilitated by the gradual diminution of the value of the cowrie.

MR. THOMAS, in Prinsep's *Useful Tables*, p. 98, quotes from SIR H. M. ELLIOT'S *Glossary of Terms used in the North-Western Provinces of India*, curious evidence as to how facilities of commerce have in recent times depressed the value of the cowrie in other more accessible parts of India.

parison of these notices is best adapted to illustrate the purchasing power of the monetary values we have discussed, it will be convenient to examine them in the present place.

30. Rice, the staple produce of the Valley, has at all times possessed great importance for the material condition of its inhabitants. It is, therefore, only natural that most of our notices refer to it. The first mention of rice-prices we find in the reign of Avantivarman. His extensive drainage operations produced a considerable fall in the rates of this produce. Previously the price of a Khāri had been 200 Dīnnāras on the average in good years,⁷⁷ and at times of famine had risen as high as 1,050 Dīnnāras.⁷⁸ The extension of cultivation on the lands reclaimed by Suyya, Avantivarman's engineer, is said to have brought it down as low as 36 Dīnnāras, or, as the old glossator A, plainly tells us, three Bāh^agañi.⁷⁹ If we take into account that the Khāri, which is still in Kāsmīr the standard measure of weight, corresponds to about 177 pounds,⁸⁰ the latter price appears even for Kāsmīr almost incredibly low. Subsequently 500 Dīnnāras for the Khāri are referred to as the price at famine rates in the time of Harṣa. As late as the reign of Zainu-l-'ābidīn (A.D. 1420—70) 300 Dīnnāras were the price in ordinary years, while 1,500 Dīnnāras were paid in a famine.⁸¹

Against this figure the 10,000 Dīnnāras quoted as a famine price under Muḥammad Shāh in the sixteenth century show already a considerable rise.⁸² This increase

⁷⁷ See *Rājat.*, v., 116.

⁷⁸ See *Rājat.*, v., 71.

⁷⁹ *Rājat.*, v., 117, and above, § 6.

⁸⁰ Compare note, *Rājat.*, v., 71.

⁸¹ *Śriv.*, i., 202.

⁸² Fourth Chron., 347.

must have been due partly to permanent causes, such as we have alluded to above. For we are informed by Abū-l-Faẓl that when under Akbar Qāzi 'Alī carried out a revenue assessment of Kaśmīr, "taking the prices current for several years," the average price of the Kharwār (or Khāri) "in kind" was ascertained to be 29 Dāms (*i.e.*, 2,900 Dīnnāras); the Kharwār "in money" was fixed according to the former rate at $13\frac{8}{15}$ Dāms (*i.e.*, 1,332 Dīnnāras):⁸³ The price given here for the "Kharwār in money" represents the fixed commutation rate at which grain, in accordance with a system surviving in part to the present day, was sold from the state stores to the city population.⁸⁴

31. Of the prices current for other commodities we hear unfortunately but little. In his description of a famine under Harṣa, Kalhaṇa informs us that the *pala* of wool sold for 6 Dīnnāras.⁸⁵ As 1,920 Palas go to the Khāri, the price of the latter was accordingly 11,520 Dīnnāras. For comparison's sake it may be stated that wool, until recent economical changes, was priced at about 44 Rupees per Kharwār. This sum converted at Abū-l-Faẓl's rate of 40 Dāms or 4,000 Dīnnāras = 1 Rupee, corresponds to 176,000 Dīnnāras. At the same famine, rice was sold at 500 Dīnnāras for the Khāri.

⁸³ See *Āin-i Akb.*, ii., pp. 366 *sq.*

⁸⁴ Compare, regarding the "Kharwār in money," which appears in the Lokaprakāśa as *dīnnārakhāri*, my note on *Rājat.* v., 71. For the system by which the State monopolised the greatest portion of the grain trade, see Mr. LAWRENCE'S *Valley of Kashmir*, pp. 390 *sq.* It may be of interest to note that the price of rice as sold from the State stores amounted to 10 Annas (British currency) at the end of Mahārāja Gulāb Singh's reign. In the present year (1898) it is 1 Rupee and 4 Annas per Khār. The latter rate would correspond to 50 Dāms of Akbar.

⁸⁵ See *Rājat.*, vii., 1221.

If we accept Rs. 2 per Khāri as a fair average rate in recent years for rice sold in the open market, and assume that the value of wool has risen since Harṣa's time in the same proportion as that of rice, we get the equation $500 : 8,000 = x : 176,000$. This gives us 11,000 Dīnnāras as the price of a Khāri of wool for the period referred to by Kalhaṇa, and this agrees closely with the 6 Dīnnāras per Pala, or 11,520 Dīnnāras per Khāri, recorded in the text.

At the same famine, one Dīnnāra is said to have been the price for two Palas of grapes (*mārdevika*),⁸⁶ which gives a price of 960 Dīnnāras for the Khāri. I am unable to compare this rate with modern prices, as the wholesale production of grapes in the Valley is now practically restricted to the State vineyards on the Dal which supply the State wine factory. But fortunately we have a quotation for Akbar's time in a passage of the *Āin-i Akbarī*, which informs us that "in Kāsmīr 8 Sērs of grapes are bought for 1 Dām."⁸⁷ 8 Sērs are equivalent to 160 Palas; hence, at the above rate, 1 Pala cost $\frac{1}{160}$ or $\frac{1}{8}$ Dīnnāra. We see that what was a famine rate in the eleventh century, had become the ordinary price five centuries later.

32. Reference has already been made to the curious

⁸⁶ See *Rajāt.*, vii., 1220.

⁸⁷ See *Āin-i Akb.*, i., p. 65. In the same passage we read that the expense of transporting a maund of grapes was 2 rupees; "the Kashmirians bring them on their backs in long baskets." The cost of transport (to Delhi?) here quoted is characteristic for the obstacles in the way of commerce between Kāsmīr and India. The maund of Akbar may be reckoned at about one-half of the present standard Maund, i.e., at 40 pounds; see PRINSEP, *Useful Tables*, p. 111. The mode of transport here described is still in vogue for Kāsmīr fruits.

specimen of a Baṇiā's account to which Kalhaṇa treats us in his story of the law suit wisely decided by King Uccala (viii. 136-143). Small as the amounts named for the several amusing items must appear to us when converted into their real value at the rate now ascertained, we can yet scarcely accept them as genuine quotations of prices.⁸⁸ For it is evident from the tenor of the anecdote that the amounts stated are meant to represent the grossly exaggerated charges of a cheating petty trader. But even as such they are characteristic for the extreme cheapness of old Kaśmīr.

Salt has always been a comparatively expensive article in Kaśmīr, as it has to be imported from the Panjāb or Ladākh. Śrīvara tells us that at a time when the passes to the south were closed owing to political troubles, the price even in the capital rose to 25 Dīnnāras or a Pūntshu for $1\frac{1}{2}$ Palas.⁸⁹ At present 8 Sērs salt for the rupee is considered a low rate in Śrīnagar. At this rate one Sēr costs $\frac{1}{8}$ of a Rupee, or 5 Hāth (500 Dīnnāras), according to the estimate of Abū-l-Faḡl; this gives for 1 Pala or $\frac{1}{2}$ Sēr a price of $\frac{5}{2}$ Dīnnāras. We see that the emergency rate of the fifteenth century was yet 50 per cent. below the present ordinary rate.

33. The extreme cheapness of all indigenous produce

⁸⁸ The items are : 600 Dīnnāras for bridge tolls ; 100 D. for the repair of a shoe and whip ; 50 D. for Ghee as an ointment ; 300 D. as compensation for a load of broken pots ; 100 D. for mice and fish-juice bought in the Bazar as food for a litter of kittens (!) ; 700 D. for an ointment and small quantities of rice, Ghee and honey as required at a Śrāddha ; 100 D. for honey and ginger for a sick child ; 300 D. for an unfortunate beggar (enough to feed him on rice for perhaps three months!) ; 100-200 D. for scent and other small offerings to Tantric Gurus.

⁸⁹ See Śrīv., iv., 584.

in Kāsmīr which the prices here examined indicate, not only for the Hindu period, but also for centuries after its close, might excite doubts as to the correctness of our price calculations, had we not the evidence of Abū-l-Faḍl to fall back upon. But Kāsmīr is not the only part of India to astonish us by the cheapness of its commodities. For what IBN BATŪTA, the traveller of the fourteenth century, tells us of the prices current in the Bengal of his own time, comes apparently very close to the economic conditions of old Kāsmīr.⁹⁰

An acquaintance of his, Ibn Batūta informs us, used to buy there a twelvemonths' supply for his household of three for a silver dīnār, equivalent to a rupee. The quantity of unhusked rice thus purchased was eighty Delhi rothls, or about 2,300 lbs. *avoirdupois*.⁹¹ He saw a milch cow sold in Bengal for three silver dīnārs (or 1½ rupees), eight fat fowls sold for a dirhem (one-eighth of a rupee), etc. And from a note of SIR H. YULE we learn that even at the end of the seventeenth century 580 lbs. of rice were bought at Chittagong for a rupee, and sixty "good tame poultry" for the same money.⁹² If we meet

⁹⁰ I take this curious information from SIR HENRY YULE's *Cathay and the Way Thither*, where extracts of Ibn Batūta's travels are illustrated with a profusion of learned notes; see pp. 456 sq. for the account of Bengal prices.

⁹¹ Another valuation of the rothl (or Maund) of that period at 24·7 lbs. would reduce the purchase to about 1,976 lbs., still a respectable quantity.

⁹² See SIR H. YULE, *Cathay*, Supplem. note, p. ccli., quoting from Hamilton's *New Account of the East Indies*, ed. 1744, ii., p. 28.

It is probable that similar evidence for low prices of agricultural produce could be collected for other parts of India also. But I am unable at present to refer to the works which are likely to furnish these data.

with such prices in a large province boasting of easy communications by sea and rivers, and forming part of a great empire, we can scarcely wonder at the cheapness that reigned in the Kāśmīr of Hindu times.

34. It is manifest that the rates of victuals, and in particular those of rice, as recorded by Kalhaṇa, afford the best gauge for an estimate of the relative value which cash sums, like salaries, represented in old Kāśmīr. For the purpose of such an estimate we shall scarcely err considerably if we take 200 Dīnnāras as a fair average rate for the Khāri of rice.⁹³ Estimated by this standard, the 100,000 Dīnnāras daily pay which Udbhaṭa, Jayāpīḍa's Chief Paṇḍit, was lucky enough to draw,⁹⁴ was a very respectable remuneration indeed, corresponding in value to 500 Khāris of grain. Calculated at the rate indicated by Abū-l-Faẓl, and increased by 12 per cent. in accordance with the greater intrinsic value of the earlier copper coinage, the Lakh of Udbhaṭa's daily pay would amount to 28½ rupees.

Such a daily allowance, though acceptable enough even for a Paṇḍit of the present day, would scarcely excite the attention of a modern chronicler. The matter, however, appears in a different light if we convert the sum named by Kalhaṇa into its equivalent in grain, and estimate the present value of the latter according to the commutation rate of 1¼ rupee for the Khāri.⁹⁵ We arrive, then, at the sum of 625 rupees as representing approximately for the

⁹³ We have seen that 200 Dīnnāras was the usual rate before Avantivarman extended the area of cultivated land (v. 117). In the fifteenth century the ordinary price was still only 800 Dīnnāras (see *Śrīv.*, i., 202).

⁹⁴ *Rajāt.*, iv., 495.

⁹⁵ See above, § 30.

present day the same purchasing power which Udbhaṭa's 100,000 Dīnnāras had in his own time.

Calculated on the same basis, even the sum of 2,000 Dīnnāras of Lavāṭa, the favourite of Śaṃkaravarman, was a large daily allowance for one who had been a load-carrier by occupation.⁹⁶ And it is not difficult to realize that the subsidies paid by King Ananta to the refugee Śāhi princes, amounting to 150,000 Dīnnāras daily in the case of Rudrapāla, and 80,000 Dīnnāras in that of Didāpāla, were a serious drain on the royal treasury.⁹⁷ The quantities of grain which these sums could purchase in the Kāśmīr of the eleventh century would at the present day represent values of about 937 and 500 rupees respectively, according to the above calculation. We can thus well understand the astonishment which Kalhaṇa expresses at the fact that even such magnificent allowances did not prevent their high-born recipients from being troubled by debts.

35. We are all the more justified in taking the prices of grain as the true standard by which to estimate the relative value of the cash amounts mentioned in the Chronicle, because there is good reason to believe that rice has already in early times formed a kind of a subsidiary currency in Kāśmīr.

This belief is based primarily on the fact that such a system has survived in Kāśmīr to the present day. As by far the greatest part of the land revenue was until quite recently collected in kind,⁹⁸ it was the regular system for the State to pay all salaries, grants, etc., in

⁹⁶ See *Rājat.*, v., 205.

⁹⁷ Compare *Rājat.*, vii., 144 *sqq.*

⁹⁸ See my note, *Rājat.*, v., 171.

grain or other produce taken from the State stores. Since the reign of Mahārāja Gulāb Singh (A.D. 1846-57), the amounts payable to servants of the State were nominally fixed in rupces, and these sums subsequently converted into "Śālī" (rice) or other produce available in the State granaries according to the established commutation rates referred to. Previously, however, even these nominal cash rates were unknown in official use, and all salaries, etc., were actually fixed in Khāris of rice. The custom thus established extended to the wages of all sorts of private servants; in this sphere it has been maintained to the present day.

The following remarks of Mr. LAWRENCE, late Settlement Commissioner, Kashmir, graphically describe the state of things as it existed till the introduction of recent administrative reforms.⁹⁹ "In 1889, when I commenced work, it might be said that money prices did not exist. Salaries were paid in grain, and I remember that in 1889 I was requested to take oil-seeds, in lieu of cash, in payment of the salary of myself and my department. Oil-seeds were looked upon as an appreciated currency. Not only did the State pay its officials in grain, but private persons paid their servants in the same fashion, and 16 to 20 Kharwārs of Shālī was the ordinary wages of a domestic servant. The currency was to a great extent Shālī, and silver played a subsidiary part in the business of the country."

36. That the system here described has come down from an early time is proved beyond all doubt by the detailed account of Abū-l-Faẓl. This shows that the revenue administration of Kaśmīr was in the sixteenth

⁹⁹ Compare *Valley*, p. 243.

century materially the same as in recent times.¹⁰⁰ The same must be concluded for the Hindu period from such indications as Kalhaṇa gives us.¹⁰¹ By far the greatest portion of the land revenue being assessed and collected in Khāris of grain, the consequences in respect of the currency must have been similar to those observed in modern times. The Lokaprakāśa fully supports this conclusion. We find there passages naming Khāris of rice (*dhanya-khārī*) in fixed quantities as payments of rents, fines, interest, etc., even in cases where the original amounts forming the subject of contracts are quoted in Dīnnāra figures.¹⁰²

The system of reckoning incomes in grain is widely spread throughout Asia, and is naturally well adapted to the economic conditions of a mainly agricultural country.¹⁰³ In a territory isolated by great mountain barriers and hence far removed from the influences of export trade like Kāśmīr, such a system, based on the staple produce of the country and the main food stuff of its inhabitants, must have specially recommended itself by its stability.

Its existence in old Kāśmīr, which we conclude from the

¹⁰⁰ See *Āin-i Akb.*, ii., pp. 366 sqq.

¹⁰¹ See my notes on *Rājat.*, v., 171 sqq.

¹⁰² Compare, e.g., *Ind. Stud.*, xviii., pp. 846, 878. In another passage of Book ii., the yearly pay of a servant is fixed at 15 Khāris of rice, which together with some small perquisites are valued as the equivalent of 5,000 Dīnnāras.

¹⁰³ Friar Odoric, in his account of the Chinese province of Manzi, speaks of a certain rich man "who hath a revenue of XXX *tuman* of *tagars* of rice. And each *tuman* is ten thousand and each *tagar* is the amount of a heavy ass-load" (our Khar-wār, i.e., Persian **Khar-bār*). See *Cathay*, p. 152. SIR H. YULE in his note remarks: "Revenues continued to be estimated in China in sacks of rice until lately, if they are not so still. In Burma they are always estimated in baskets of rice."

evidence above indicated, greatly helps us to understand the facts we have ascertained regarding the cash currency of the country. A monetary system based on the cowrie unit, and represented in its main bulk by a copper coinage, becomes far more intelligible if we realise that it was supplemented in all important transactions of public business and private life by the ample stores of another circulating medium, the Khāri of rice.

M. A. STEIN.

MISCELLANEA.



A HOARD OF CYRENAIC BRONZE COINS.—The hoard of coins, of which the present condition¹ is illustrated in the accompanying block, is the property of Mr. George Armes, of Eastbourne. It is said to have belonged formerly to Sir Francis Drummond Hay, who doubtless obtained it when consul-general in Tripoli. The hoard was evidently buried in a bowl, of which the form is preserved by the present solid mass, weighing 13 lbs. 1 oz. avoirdupois (=5.927 kil.) and measuring 6 in. (15.5 cm.) An indentation in the side not seen in the illustration may be explained by the side of the bowl having been knocked in; for it does not appear that it can be explained by a fracture, at any rate of recent date.

The coins are much corroded, and it has therefore seemed that the hoard presents more interest as it is than it would if broken up. Some nine or ten coins have however accidentally come away. An examination of these, compared with the

¹ In *Numismatic Chronicle*, 1871, pp. 1 ff., Sir Hamilton Lang describes a treasure of silver coins from Idulium, which were similarly adhering to each other: "The appearance of the whole gave me the idea of their having been originally confined in a bag of which time had left us no traces."

others, still adhering, of which the types are visible, seems to prove that the hoard consisted entirely of one class of coins, viz. :—

Obv.—Head of Apollo r., laureate.

Rev.— $\begin{smallmatrix} K & Y \\ P & A \end{smallmatrix}$ Kithara.

[Müller, *Num. de l'anc. Afr.*, I. p. 58, Nos. 273 f.]

Mr. Armes, however, describes a loose specimen as having the types of Müller, No. 268 (head of Zeus Ammon, *Rev.* K Y P A and palm-tree). No coin of these types can be discovered among those before me.

It is worthy of notice that of the seven reverses which I have been able to compare with each other, no two appear to be from the same die.

G. F. HILL.

ON A NEW COIN OF ASPAVARMA.—Some time back I sent a note to the *Chronicle* on a new coin of Aspavarma. At that time I had seen no other of this type. I have, however, now seen three coins in the possession of W. Stanley Talbot, Esq., C.S., Settlement Office, Jhelum, Panjab. These agree exactly in the matter of obverse and reverse images and monograms with the coin I edited, but the legend on the reverse is so full, that by collating the three coins, the whole may be read. In the first place, the name 𑀮𑀺𑀭𑀸𑀓 , "*Aspavarmasa*," comes in the place of the king's name, *i.e.*, under the image of Jupiter. Then, reading from the inside, we have 𑀧𑀺𑀢𑀺𑀓𑀢𑀺𑀓𑀢𑀺𑀓 , "*Jayatasa Tratarasa*." Then reading, strange to say, from the outside, 𑀮𑀺𑀭𑀸𑀓 , "*Strategusa*." Next, reading from the inside, 𑀮𑀺𑀭𑀸𑀓𑀢𑀺𑀓𑀢𑀺𑀓𑀢𑀺𑀓 , "*Indravarma putrasa*." This completes the legend.

On the obverse the barbaric Greek legend is in fragments, but it reads from the outside! By collating the coins it could not be obtained entire. The Gondopharres family mark 𑀮𑀺𑀭𑀸𑀓 is, however, to the left of the horse, and under it is a monogram. Also under the feet of the horseman is another monogram.

These coins seem to show that Aspavarma, when he struck them, was exercising regal powers. On the coin of Azes, bearing his name on the reverse, "*Jayatasa*" comes in the place of the king's name. In these three coins, "*Aspavarma*" occupies this place. Among the titles of the king we find "*Tratarasa*" = $\Sigma\Omega\Theta\text{HP}\sigma\text{S}$, a title never used, as far as we know, by any subject. The use of this title, with the name Aspavarma in the

place of the king's name, seems to point out that Aspavarma was king when these coins were issued.

We are still at a loss in ascertaining the connection between Aspavarma and Gondopharres. We are left to conjecture. It would seem that Aspavarma, having been "Victorious" under Azes, in the time of Gondopharres was an independent ruler allied with that king. This makes Aspavarma either very long-lived, or else it compels us to bring Azes down to a later date than the one usually assigned to him, or else we must regard the date assigned to Gondopharres as too late, and this seems to disagree with numismatic data and deductions.

It will be noticed that coins of Gondopharres and Abdagases bear the title "Soteris," but that this title is on no known coin of Azes.

Moreover, if we compare the coins bearing the name "*Sasana*" with these coins of Aspavarma, we shall see that there is great similarity in structure, images, and metal. On a coin I saw from Quettah in December, 1892, with monograms nearly similar to those on these coins of Aspavarma, I read $\Lambda\Lambda\Lambda\Gamma\Lambda\text{CC}\Sigma$, and the reverse had on it, amongst other things, $\Psi\Xi\Zeta\Upsilon$, "*devahadasa*." This would seem to join Abdagases with Aspavarma somewhat. Now, as in all probability Abdagases reigned contemporaneously with his uncle Gondopharres and along with Sasan, it would appear that Aspavarma must have been a tetrarch in the empire of Gondopharres. We know from coins that Gondopharres reigned from Hazara in the Panjab to Quettah in Beluehistan, and from Kabul to the Sutledge. This was a large tract to rule. No wonder Gondopharres sought aid. Whether Aspavarma was lent to Gondopharres, or whether Azes died and Aspavarma offered his services to Gondopharres, we do not know.

We must now look out for coins of Aspavarma which will give us the whole of the Greek legend. It may be there is a surprise there in store for us. Meanwhile, we have secured the Pali legend, which establishes the kingship of Aspavarma.

CHARLES J. RODGERS.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

Catalogue of Greek Coins in the Hunterian Collection, University of Glasgow. By George Macdonald, M.A., Glasgow, 1898.

The fashion of coin-collecting which prevailed to so remarkable an extent among men of taste and culture in England

during the eighteenth century has indirectly endowed this country and its museums with numismatic treasures unrivalled, in most branches, by those of other nations, and has produced, also indirectly, in our own times, quite a school of classical numismatists, who, in their turn, by means of their chronologically-arranged catalogues and photographic reproductions, have shown the archæologists of the Continent how high a place numismatics occupies in the pursuit of historical, palæographical, and artistic research and study.

Only recently the Berlin *Akademie der Wissenschaften*, instigated by Mommsen, has undertaken the colossal work of compiling a "Corpus" of all known Greek coins. This would have been quite impossible had it not been for the solid foundations already laid by such works as the British Museum *Catalogue of Greek Coins*, and the catalogue of the rich collection bequeathed to the University of Glasgow, more than a hundred years ago, by Dr. Hunter.

William Hunter was conspicuous among the enlightened dilettanti of the last half of the eighteenth century. He was a well-known, and probably the leading, London physician of his time, and his house in Great Windmill Street, to which he had removed from Jermyn Street in 1770, contained a noble room, specially constructed to hold the treasures of science and art which it was his delight to accumulate from every available source at home or abroad.

His splendid collection of Greek, Roman, and English coins, numbering in all some 30,000 specimens, was got together by him in the comparatively short space of thirteen years (1770-1783). In the Introduction to the volume now before us Mr. Macdonald, from Hunter's own manuscript notes, has been able to compile a most interesting and detailed account of Hunter's various purchases and method of collecting. It does not appear that he was himself a student of the science of numismatics. His more modest ambition was rather to gather together into his own possession materials for future research, viz., all the famous cabinets of Greek and Roman coins which came into the market, or which he could prevail upon their owners to part with.

At the same time he was ever a judicious and cautious buyer, and he attached no value to coins which were not of undoubted authenticity and of fine preservation.

In one of his letters to Sir William Hamilton, British Ambassador at Naples, written in 1774, Hunter writes, "The collectors here are more nice about preservation than they seem to be in Italy. What we call *fine* preservation is elegant and *beautiful*; what I believe you call *bellissimo* and conserva-

tismo. And we allow neither *false* medals to be mixed for filling up the series, nor even those that are *suspicious*. We say that if a medal is but suspected it is good for nothing, because it *proves* nothing."

This remark shows that Dr. Hunter's true motive in collecting coins was a scientific one, and that he always kept in mind the important part that his coins might, some day, play in the "illustration and confirmation of history"; and, as Mr. Macdonald justly remarks, "the more fully he realised the exceptional opportunities for study afforded by a large collection the more generously did he spend money and labour in the endeavour to make his own as complete as possible. Indeed, it is no exaggeration to say that he regarded the possession of his cabinet as a public trust, and its augmentation as a public duty."

Hunter's income does not appear, however, to have exceeded £7,000 or £8,000 a year, and it was sometimes necessary for him to pay for collections which he purchased by yearly instalments.

It is, therefore, truly remarkable how many cabinets he managed to absorb. A rival collector, Francis Carter, thus writes to his friend, John Nichols, the printer (1780), "God grant I may be able to keep my coins from his (Dr. Hunter's) clutches! He had the impudence to tell me, in his own house, last winter, that he was glad to hear of my loss by the capture of the *Grenades*, as it might force me to sell him my Greek coins: an anecdote which you should not forget when you write his life."

The total sum which Hunter expended on coins alone amounted to no less than £22,664. His chief adviser in his purchases of Greek and Roman coins was Charles Combe, like himself, a medical man, and the first English numismatist of his time. To him it was that Hunter entrusted the compilation of the catalogue in Latin of this portion of his cabinet. One volume only of this work ever appeared, *Nummorum veterum populorum et urbium qui in Museo Gulielmi Hunter asservantur descriptio figuris illustrata*, London, 1782; but had Hunter lived another ten years his intention to commission Combe to complete the work in six more volumes would have been carried out.

When, however, on his death in 1783, he bequeathed his museum to the University of Glasgow, to be employed in the manner "most conducive to the improvement of the students," no special provision was made for continuing the catalogue, and it is to the generosity of Mr. James Stevenson, of Glasgow, that, after the lapse of a century, the University is at last in a position

to carry out Hunter's wishes of making his collection useful to the public "for the improvement of knowledge."

Dr. John Young, the Keeper of the Hunterian Museum, has been fortunate in securing the services of such an able numismatist and archaeologist as Mr. George Macdonald for cataloguing the Hunterian Greek coins, for, as a preliminary to cataloguing, the entire collection had to be scientifically arranged in geographical and chronological order. This Mr. Macdonald has done throughout on the lines laid down in the *Historia Numorum*, 1887. The great *Catalogue of Greek Coins in the British Museum*, begun in 1872 and now approaching completion, has also served as a model for Mr. Macdonald in most respects, though he has, we think with advantage, added brief explanatory notes and headings to the various sections, which can hardly fail to be of use to such as are not already experts in numismatics.

The present volume contains descriptions of all the ancient coins of Italy, Sicily, Thrace, Macedon, and Thessaly, and we learn that the second volume, already well advanced, will comprise the remainder of European Greece, and perhaps the whole of Asia Minor, while a third volume will, it is calculated, bring the work to a conclusion with the coins of Northern Africa, Spain, Gaul, and Britain. The plates which accompany and illustrate the volume are 80 in number and reproduce, by the colotype process, about 600 specimens. They are, unfortunately, not very well executed; at any rate not so skilfully as those of the British Museum publications by the London Autotype Company.

The volume contains no less than eleven useful indexes, of which the last, that of Remarkable Inscriptions, Titles of Cities, &c., provides all necessary transliterations of legends in unfamiliar scripts, such as those of the Æscan-speaking tribes of Italy, of the Etruscans, the Umbrians, and of the Phœnician settlers in Sicily.

The University of Glasgow is to be warmly congratulated on the apparently tardy, though for that very reason, far more perfect realisation of Hunter's original scheme than any which he could himself have carried out or foreseen, or any which could have been executed even as lately as thirteen years ago, when Mr. James Stevenson first made his munificent offer to the University of bearing the entire expense of printing and publication.

B. V. H.

VIII.

OLBA, CENNATIS, LALASSIS.

(See Plate XII.)

THE numismatic history of Olba is intimately connected with that of Cennatis and Lalassis. While it is hardly possible, with our present information, to delimit exactly the latter districts,¹ the site of Olba itself is fixed at *Oura*, which preserves the ancient name.² The sanctuary of Zeus Olbios, to which the city was attached, stood at what is now called *Uzundja-Burdj* (i.e., "tall castle") to the west of the city.

Olba (which on some coins of imperial date is called metropolis of Cetis, and, on one of Geta, is connected with Cennatis) is mentioned by Ptolemy twice under the corrupt form "Ολβασα."³ It was the seat of the priest-kings of the dynasty supposed to have been founded by Ajax, son of Teucer; and these two names were borne by most of the priests.⁴ M. Antonius Polemo, who was high-priest and dynast of Olba, ruled also, as his coins show, over Cennatis

¹ The accompanying sketch-map is based on that in Heberdey and Wilhelm's *Reisen in Kilikien* (Wien, 1896), but does not pretend to accuracy in details.

² *Class. Rev.* iv. p. 185; Bent, *J. II. S.* xii. 222; Ramsay, *Hist. Geog.* p. 364; Heberdey-Wilhelm, *Reisen in Kilikien*, pp. 83, 84, 90.

³ V. 6, 17 (in the *στρατηγία Ἀντιοχιστῆς*); 8, 6 (in *Κηρίς*).

⁴ Strabo xiv. p. 672.

and Lalassis. Ajax, son of Teucer, who, although the name of Olba does not occur on his coins,⁵ was high-priest, and probably issued his coins from the same place, is called toparch of Cennatis and Lalassis. Cennatis had for its metropolis, from the time of the Emperor Commodus, the city of Diocaesarea. Of this city we only know that it was on or near the lower Calycadnus, not far from Seleucia, on the road thither from Laranda, not far from Olba, and that it is mentioned along with Claudiopoli and Coropissus in various lists.⁶ Further, we know from the coin of Geta already mentioned, that Olba was, if not in, yet closely connected with Cennatis. It would seem, therefore, that Cennatis was a district on the left bank of the lower Calycadnus, and that Olba was one of its eastern cities, while Diocaesarea is to be looked for in the triangle of which Olba is the apex, and the course of the Calycadnus from Claudiopoli to Seleucia the base. Ramsay, however, has given reasons for placing Diocaesarea, along with Cennatis, on the south side of the Calycadnus.⁷

Lalassis has been identified by Sterrett, on the strength of the resemblance in the names, with the district round *Lachlas*, on the upper waters of the southern branch of the Calycadnus (*Ermeneke Su*⁸). A passage of Pliny (*N. H.* V. 94) has some bearing on the extent of the district: *Ciliciae Pamphylia omnes iunxere neglecta gente Isaurica. Oppida eius intus Isaura, Clibanus, Lalasis; decurrit autem*

⁵ Ramsay, *Hist. Geog.* p. 372. For the coin supposed to read K]AIOA[BEΩN see below, No. 9 of Ajax.

⁶ Ramsay, *Hist. Geog.* p. 454. Claudiopoli is now fixed at Mut (Headlam), *J. H. S. Suppl. Paper*, 1893, *Eccles. Sites in Isauria*, pp. 22, 28, No. 1; cf. Ramsay, *Rev. Num.* 1894, pp. 164 ff.

⁷ *Hist. Geog.* pp. 454, 455.

⁸ Ramsay, *Hist. Geog.* p. 365.

ad mare Anemuri e regione supra dicti (so Detlefsen ; Sillig reads *Anemurii regione*). Ramsay, who formerly⁹ followed the older texts, which separate *Lalasis* from the preceding words, and make it the subject of *decurrit*, now, as he informs me, prefers the text of Sillig. The meaning of Detlefsen's text is obscure: *e regione* must mean (1) 'in a straight line,' or (2) 'over against,' or (3) 'from the district' (in which case, read *e regione supra dicta*—a loose reference to inland Isauria). But Sillig's text gives excellent sense: the inland towns of the Isaurian race are Isaura, Clibanus, Lalasis; moreover it extends down¹⁰ to the sea-coast in the district of Anemurium mentioned above (§93). Pliny accordingly may be taken as making Isaura and Anemurium the northern and southern extremes of the Isaurian race, with Lalasis an inland town, in a position which suits well the position now marked by Laehlas. Ptolemy (V. 8, 6) mentions Ninica (Claudiopolis, not to be confused with Claudopolis—*Mut*) under the heading *Δαλασιῶος*. If the names Dalisandos (Lalisandos) and Dalasis (Lalasis) are to be connected, and Dalisandos is at *Sinabitch*,¹¹ we have evidence for the extension of Lalassis as far east as the junction of the two branches of the Calycadnus, where it probably adjoined Cennatis.

Of Cotis or Cietis, I will only say here that it included Olba, Coropissus, Philadelphia¹², and, according to Ptolemy

⁹ *Rev. Num.* 1894 p. 172. I take this opportunity of expressing my great obligations to Professor Ramsay, who has had the kindness to read these pages in manuscript, and make some most valuable criticisms.

¹⁰ For Pliny's use of *decurrere* of a country in the sense of "extend," see Forcellini, *s. h. v.* 6.

¹¹ As to which, see Heberdey-Wilhelm, *op. cit.*, pp. 120 f.

¹² Which is distinct from Germanicopolis, as the coinage of the two places shows.

(V. 8, 3) the whole coast district from Anemurium to some point east of the mouth of the Calycadnus. It probably, therefore, contained Cennatis and part of Lalassis, being indeed the general term for the greater part of Western Cilicia.¹³

I now proceed to consider the coinage of Cennatis and Lalasis (or Lalassis, as it is more frequently written on coins), and of Olba so far as it bears on the still unsettled problems of history and topography connected with these names.¹⁴

Mionnet (Vol. iii. p. 532, 7 and 8) described two coins with inscriptions which he read $\Lambda\Lambda\Lambda\text{ACCE}\omega\text{N}$, $\Lambda\Lambda\Lambda\text{SS}\Sigma$. ENTIM, $\Lambda\Lambda\Lambda\Lambda$. These legends, according to Waddington,¹⁵ are quite undecipherable. But Imhoof-Blumer has pointed out,¹⁶ that the cornucopiae and triskeles of one of these coins are suitable to Lalassis, since the former is a type of the *Κοινὸν Λαλασέων καὶ Κεννατῶν*, while the latter is a symbol on the coins of M. Antonius Polemo and a type of Ajax. Of the two types of these two princes, the triskeles is the only one which

¹³ See Wilhelm, *Arch-Ep. Mitth. aus Oest.* xvii. (1894), pp. 1 ff., who shows that the *Clitae* of Tacitus, *Ann.* vi. 41, and xii. 55, are the *Cietae* (as the Mediceus reads in the former passage).

¹⁴ I desire to express my sincere thanks to Dr. Dressel, and to MM. Babelou, Dieudonné, and Svoronos, by whose kindness I have been able to compare casts of all the coins of the high-priests of Olba in the Museums at Berlin, Paris, and Athens with those in the British Museum. Such comparison has enabled me to fix the various dies in use for the coinage, and to clear up some doubtful points—as, for instance, the question whether Ajax reigned for five or six years. To Herr Loebbecke and Dr. Imhoof-Blumer, as well as to Sir Hermann Weber, I am also greatly indebted for casts of various coins, of which acknowledgment is made in due place.

¹⁵ *Rev. Num.* 1883, p. 36.

¹⁶ *Num. Zeit.*, 1884, p. 280.

does not occur in some form or other on the coins of the city of Olba. But it seems, nevertheless, to have been connected with the priest-princes of Olba, and its appearance on rocks in various places seems to mark the limits of their power.¹⁷ It is quite natural, therefore, to find the symbol on a coin of the Lalasseis.

The known coins of the Κοινὸν Λαλασέων καὶ Κεννατῶν are as follows :—

(1) ΠΟΛΕΜΩΝΟΣ ΒΑΣΙΛΕΥΣ. Club.

Rev.—[Κ]ΟΙΝΟΝ ΛΑΛΑΣΕΩΝ ΚΑΙ ΚΕΝΝΑΤ
[ΩΝ]. Harpe.

Æ. 16 mm. Berlin. Koehne (*Berliner Blätter* ii., p. 265, No. 7); cf. Waddington, *Mélanges*, ii. p. 127; von Sallet, *Z. f. N.* xii. p. 366. [Pl. XII., 18.]

Koehne read this coin - - - ΩΝ ΛΑΛΑΣΕΩΝ κ.τ.λ. Examination of a cast kindly sent me by Dr. Dressel shows that the letters INON are certain, and the O probable, though faint. There can be no doubt, therefore, as to the reading KOINON, and neither ΟΛΒΕ]ΩΝ (von Sallet, *l.c.*) nor ΚΗΤ]ΩΝ (Ramsay, *Hist. Geog.*, p. 373) is admissible. At the same time the harpe and club are both types of Olba.¹⁸

(2) ΔΟΜΙΤΙΑΝΟΥ ΚΑΙΣΑΡΟΣ. Head of Domitian Cæsar l., bare.

Rev.—ΚΟΙΝΟΝ ΛΑΛΑΣΕΩΝ ΚΑΙ ΚΕΝΝΑΤΩΝ.
Cornucopiae.

Æ. 20 mm. Coll. Imhoof-Blumer, *Num. Zeit.* xvi., p. 280, Pl. V. 18; Berlin, von Sallet, *Z. f. N.* xii. p. 365; Paris, Babelon, *Inventaire Waddington*, 4428.

¹⁷ *Class. Rev.* iv. p. 185 (Kanitelois); Langlois, *Voyage en Cilicie*, p. 297 (Lamas).

¹⁸ *Num. Chr.*, 1891, p. 132.

These two coins are very similar in style. Polemo is doubtless the king who was deprived of Bosphorus in A.D. 41, when Claudius gave him a part of Cilicia.¹⁹ From A.D. 63, when Nero made Pontus, of which Polemo had retained the throne, into a province, Polemo's possessions were probably confined to this "part of Cilicia," and a part of Armenia which he had received in A.D. 60. That Polemo was living as late as April, A.D. 68, is proved by coins with the head of Galba,²⁰ (ΑΥΤΟΚΡ ΣΕΡΓΙΟΝ ΓΑΛΒΑΝ [ΤΟΝ ?] ΣΕΒΑΚΤΟΝ ΚΑΙΣΑΡΑ) and the reverse inscription ΒΑΣΙΛΕΥΣ Μ ΑΝΤ ΠΟΛΕΜ[ΩΝ] (type: Athena standing l., r. resting on spear, l on shield). As the type of Athena is not unknown at Olba, this coin, like the other one with Polemo's name, may also have been issued thence. It is generally supposed that he was dead at the time of the revolt of his freedman Anicetus in Pontus in A.D. 69, because he is not mentioned *à propos* of this affair.²¹ Why, however, he should have been mentioned, I fail to see, since his connexion with Pontus had long been severed. As to the date of the coin of Domitian, it must have been issued after the formation of Tracheia into a province by Vespasian in 74 A.D.,²² and before 81, after which date Domitian ceased to be merely Cæsar.

The fixed dates supplied by the evidence so far as we have considered it are these:

- A.D. 41. Polemo II of Pontus becomes king of part of Cilicia.

¹⁹ Dio, lx. 8.

²⁰ Babelon, *Inventaire Waddington*, No. 4427; cf. M. Prou, *Mél. d'Arch. et Hist.* (Ecole fr. de Rome), 1886, p. 284.

²¹ Tacitus, *Hist.* iii. 47, 48.

²² Suet. *Vesp.* 8.

- A.D. 60. He receives in addition part of Armenia.
- A.D. 68. He is deprived of Pontus.
- A.D. 68. He strikes coins with the head of Galba. Other coins struck by him for the κοινὸν Λαλασέων καὶ Κεννατῶν²³ may be earlier than this year, and cannot be much later. All are probably issued from Olba.
- A.D. 74—81. At some time between these dates, Polemo being dead, and Lalassis and Cennatis under provincial administration, the κοινὸν Λαλασέων καὶ Κεννατῶν issues coins with the head of Domitian Cæsar.

Our next task is to fix, as far as possible, the chronology of the issues of the ἀρχιερεῖς of Olba, M. Antonius Polemo and Ajax the son of Teucer.²⁴

In the following lists of coins of Ajax and Polemo, all the descriptions are given either from originals or from casts, except where square brackets are used. Descriptions by older writers which are too vague to admit of satisfactory classification, I have ignored.

²³ The existence of the κοινὸν before Lalassis came under provincial administration is paralleled, as Prof. Ramsay reminds me, by other cases, such as that of Lycia.

²⁴ Of the modern literature relating to this subject, the following articles must be consulted: Von Sallet, *Beitr. zur Gesch. u. Num. der Kön. des Cimmer. Bosporus u. des Pontus*, pp. 49 f.; Waddington, *Mélanges*, ii. pp. 121 f.; Mommsen, *Ephem. Epigr.* i. p. 275; Raillard, *Num. Zeit.* xxvii. pp. 28 f. For the affairs of Cilicia at this time see Ramsay, *Hist. Geog.*, especially pp. 373 f., with his later views in *Hastings' Dictionary of the Bible*, vol. ii. p. 86; cf. *Church in the Roman Empire*, p. 427. My identification of Polemo was arrived at independently, and I am at once gratified at finding my conclusion confirmed by Prof. Ramsay, and ashamed at having overlooked the reference last cited (the Dictionary had not appeared when this paper was written).

AJAX, SON OF TEUCER.

YEAR 1.

1. ΑΙΑΝΤΟΣ r., ΤΕΥΚΡΟΥ l. Head (of Ajax as Hermes?) r., in close-fitting cap; he wears ear-ring, and chlamys on shoulders; in front, caduceus; border of dots.

Rev.—ΑΡΧΙΕΡΕΩΣ
 ΤΟΠΑΡΧΟΥ Triskeles l.
 ⚡ Α
 ΚΕΝ ΝΑΤ·
 ΛΑΛΛΑΣΣ·

Æ. 28 mm. α. Athens. β. Berlin (same dies as α). γ. Loebbecke (same obv. die as α). δ. London (same dies as α). ε. Paris, Waddington (*Mélanges*, ii., p. 126, No. 1 = *Inventaire* 4418, same dies as α). ζ. Paris (same dies as α; Pl. XII. 1). η. Paris (same obv. die as α; rev., ΚΕΝΝ ΑΤ | ΛΑΛΛΑΣΣ[Σ?]). θ, ι. Weber (same dies as γ). [κ, Langlois, *R. N.*, 1854, Pl. III. 19, with ΚΕΝΝ ΑΤ. Probably same dies as η, if not the identical coin.]

2. ΑΡΧΙΕΡΕ
 ΑΙΑΝΤΟΣ Triskeles r. Border of dots.
 ⚡ Α
 ΤΕΥΚΡΟΝ

Rev.—ΤΟΠΑΡ --
 ΚΕΝΝΑ --
 ΛΑΛΛΑΣ -- Border of dots.
 ⚡ Τ [Α]

Æ. 16-18 mm. α. London. β. Paris, Waddington (*Mélanges*, ii., p. 126, No. 2 = *Invent.* 4414, same dies as α; Pl. XII. 2).

3. ΚΑΙΣΑΡΟΣ ρ., ΣΕΒΑΣΤΟΥ Ι. Head of Augustus
r., laureate.

Rev.—KENNATΩNKAIΛΑΛΑΣΣΕΩΝ Thunder-
ΑΡΧΙΕΡΕ [bolt.
ΩΣΑΙΑΝΤΟΣ
ΤΕΥΚΡΟΥ
ΤΟΠΑΡΧΟΥ
⚡ Τ Α

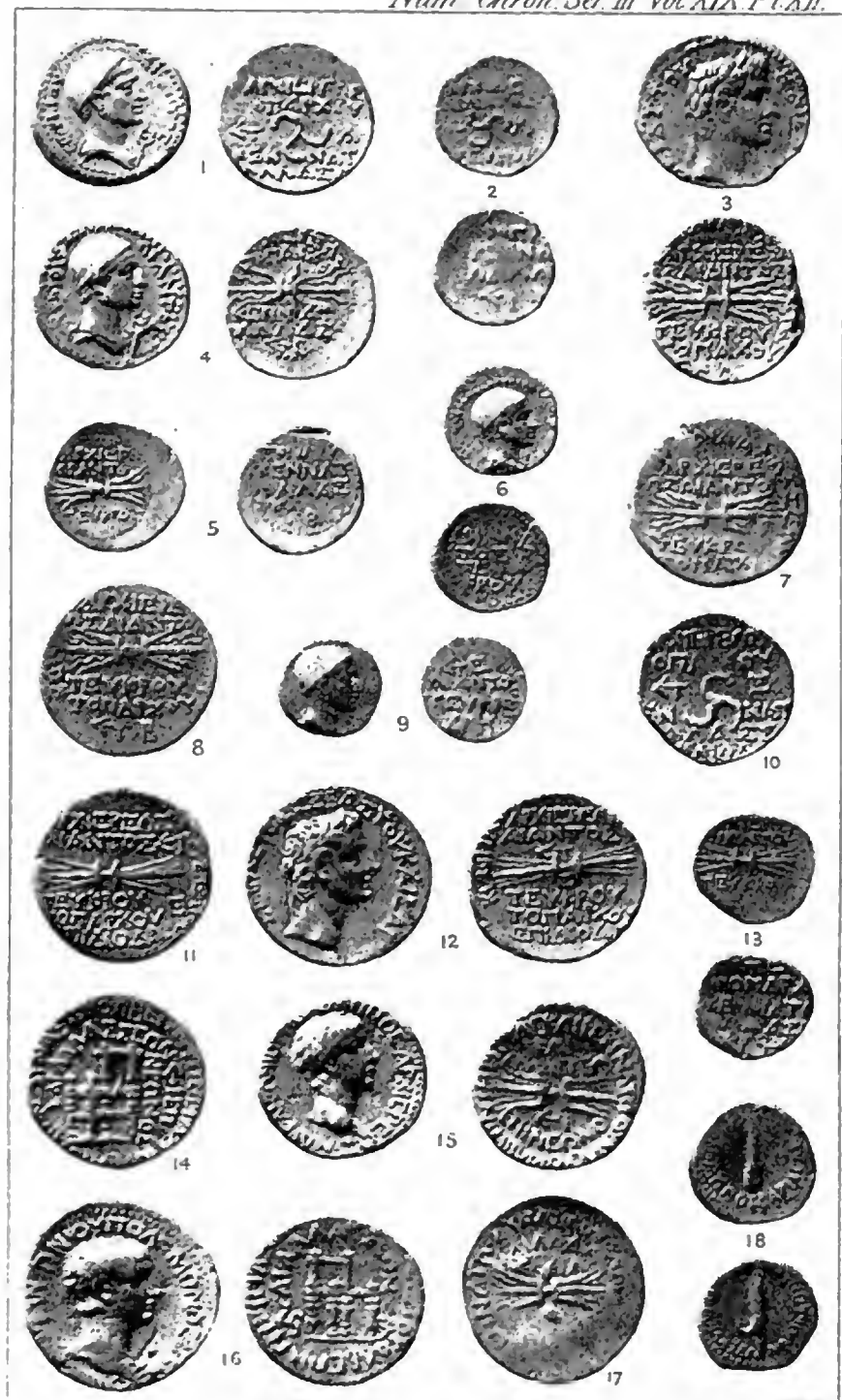
- Æ. 23-24 m.m. α. Berlin (*obv.*, ΚΑΙΣΑΡΟΣΣΕ-
ΒΑΣ ρ., ΤΟΥ Ι). β. Loebbecke (*rev.*,
ΤΟΠΑΧΟΥ; Pl. XII. 3). γ. Loebbecke (*obv.*,
ΚΑΙΣΑΡΟΣΣΕ ρ., ΒΑΣΤΟΥ Ι., same *rev.*
die as β or ε, probably the latter²⁵). δ. London
(same die as β). ε. London (same *obv.* die as γ,
same *rev.* die as β, but corrected to ΤΟΠΑΡ-
ΧΟΥ; Pl. XII. 7). ζ. London (same dies as α).
η. Paris, Waddington (*Invent.*, 4421, same dies
as β). θ. Paris (same dies as β). ι. Paris,
Waddington (*Invent.*, 4422, same dies as α).

YEAR 2.

4. ΑΙΑΝΤΟΣ ρ., ΤΕΥΚΡΟΝ Ι. Head r. as on No. 1,
with caduceus. Border of dots.

Rev.—ΑΡΧΙΕΡΕΩ[Σ] Winged thunderbolt. Border
ΤΟΠΑΡΧΟ of dots.
KENNAT
ΛΑΛΑΣ
⚡ Β

²⁵ The reverse is over-struck on a coin from the same reversed die as β or ε, probably the former; but the critical part of the word ΤΟΠΑΡΧΟΝ is not visible. The obverse shows signs of double (or over?) striking. It appears that a certain number of coins were struck with the die of β; then the mistake was discovered, and new coins (like ε) were struck with the corrected die, and some old ones were over-struck with it, giving results like γ.





- Æ. 21 mm. α, β. Berlin (both from the same dies ; Pl. XII. 4 = β). γ. Berlin (same *obv.* die as α). δ. Loebbecke (same dies as α). ε. London (same dies as α). ζ. Paris, Waddington (*Mél.*, ii., p. 126, No. 8 = *Invent.*, 4417, same dies as α). η. Paris (Mionnet, iii., p. 598, No. 277, same dies as γ). θ. In the market (same dies as α).

[5. ΑΙΑΝΤ . . ΤΕΥΚΡΟΥ. Head r.

Rev.—ΑΡΧΙΕΡΕΩΣ ΤΟΠΑΡΧΟΥ [Κ]ΕΝΝΑΤΩΝ
ΛΑΛΑΣΣ. Triskeles. In the field ΕΤ Β.

Æ. 22 mm. α. *Catal. Walcher de Moltheim*, No. 2609.]

6. Head r. as on No. 1, but without caduceus or inscription.
Border of dots.

Rev.—ΑΙΑΝ In field r. ⚡. Border of dots.
ΤΟΣ B
ΤΕΥ
ΚΡΟΥ

Æ. 15 mm. α. Loebbecke. β. Paris (same *obv.* die as α, Pl. XII. 6).

7. ΤΟΠΑΡΧ Border of dots.
ΚΕΝΝΑΤ
ΛΑΛΑΣΣ
⚡ B

Rev.—ΑΡΧΙΕΡ Thunderbolt ; border of dots.
ΑΙΑΝΤΟ
ΤΕΥΚΡΟ

Æ. 15—19 mm. α. Berlin, Pl. XII. 5. β. London (same dies as α). γ. Paris, Waddington (*Invent.*, 4415, same *rev.* die as α).

8. ΚΑΙΣΑΡΟΣΣΕ ρ., ΒΑΣΤΟΝ Ι. Head of Augustus ρ., laureate.

Rev.—ΚΕΝΝΑΤΩΝΚΑΙΛΑΛΑΣΣΕΩΝ Thunder-
 ΑΡΧΙΕΡΕΩΣ bolt.
 ΑΙΑΝΤΟΣ
 ΤΕΝΚΡΟΝ
 ΤΟΠΑΡΧΟΝ
 < Τ Β

Æ. 23 mm. α. Berlin (same *obv.* die as 3 γ, on *rev.* inser. divided ΑΡΧΙΕΡΕ | ΩΣ and date < Τ Β; Pl. XII. 8). β. Loebbecke (same *obv.* die as 3 β, same *rev.* die as α). γ. Loebbecke (same *obv.* die as 3 γ, on *rev.* inser. divided ΛΑΛΑΣΣΕ | ΩΝ). δ. London (same dies as γ). ε. London (same dies as α). ζ. Paris (same dies as γ). η. Paris, Waddington (*Invent.* 4429, same dies as α). θ. Paris (same dies as α). ι. Weber (same dies as α).

YEARS 3 AND 4.

No coins.

YEAR 5.

9. ΑΙΑΝΤΟΣ ρ., ΤΕΝΚΡΟΝ Ι. Head ρ. as on No. 1, with caduceus; border of dots.

Rev.—ΑΡΧΙΕΡΕΩΣ Triskeles ρ.
 ΤΟΠΑΡΧΟΝ
 < Ε
 [Κ]ΕΝ ΝΑΤ
 [Λ]ΑΛΑΣΣ
 [Ε]ΠΙΔΙΟΔΩ

Æ. 20 mm. α. Berlin (*Z. f. N.* xii., 365, last line misread Κ]ΑΙΟΛ[ΒΕ ΩΝ). β. Paris, Waddington (*Invent.* 4420, same dies as α; Pl. XII. 10). γ. Paris, Waddington (*Invent.* 4419, same *obv.* die as α, on *rev.* triskeles to Ι.).

It is clear from β that the numeral of the year is Ε (5) and not Γ (6); as might be supposed from α and γ.

10. Head r. as on No. 1, but without caduceus or inscription.

Rev.—< Γ Ε Border of dots.

ΑΙΑΝΤΟ

ΤΕΥΚΡΟ

Two monograms.

- Æ. 14-15 mm. α. London (Pl. XII. 9). β. Paris, Waddington (*Invent.* 4418, date effaced). [γ. *Catal. Behr.*, Pl. II. 2].

The monograms on α are apparently ΧΡ, ΕΥ, on β ΣΡ, ΕΥ. In *Mél.*, ii., p. 126, No. 4, Waddington describes a coin in his collection with obverse as above, and on the reverse ΑΙΑΝΤ. ΤΕΥΚΡΟ. ΕΤ. Β; in the field, triquetra and two monograms, of which one represents ΔΙΟΔΩΡΟΥ. But these monograms seem to occur only on coins of year 5, and among the casts of the Waddington coins kindly sent me by M. Dieudonné I am unable to trace this coin.

11. [ΑΡ]ΧΙΕΡ. Thunderbolt.

ΑΙΑΝΤΟΣ

ΤΕΥΚΡΟΝ

Rev.—< Γ Ε

ΤΟΠΑΡΧ

ΚΕΝΝΑΤΩ

ΛΑΛΑΣΣ

Two monograms.

- Æ. 17 mm. α. Berlin. β. Paris, Waddington (*Invent.* 4416, same *obv.* die as α; Pl. XII. 13).

The monograms have apparently the same forms as on No. 10 β.

12. ΣΕΒΑΣΤΟΣΣΕΒΑΣΤΟΥΚΑΙΣΑΡ Head of Tiberius r. laureate.

Rev.—KENNATΩNKAIΛΑΛΑΣΣΕΩΝ Thunder-
 APXIEPEΩΣ [bolt.

AIANTOS

↯ or ↯

Ε

ΤΕΥΚΡΟΥ

ΤΟΠΑΡΧΟΥ

ΕΠΙΔΙΟΔΩ

Æ. 24 mm. α. Berlin. β. Berlin. γ. Imhoof-Blumer (same dies as α). δ. Loebbecke (same dies as β). ε. London, Bunbury (same dies as β). ζ. London. η. London. θ. Paris (same dies as β). ι. Paris, Waddington (*Invent.* 4424, same dies as ζ). κ. Paris (*Pl.* XII. 12).

All the above coins are from the same obverse die.

13. ΣΕΒΑΣΤΟΣΣΕΒΑΣΤΟΥΚΑΙΣΑΡ Head of Tiberius r., laureate.

Rev.—KENNATΩNKAIΛΑΛΑΣΣΕΩΝ Thunder-
 APXIEPEΩΣ [bolt.

AIANTOS ↯

ΤΕΥΚΡΟΥ Ε

ΤΟΠΑΡΧΟΥ

ΕΠΙΔΙΟΔΩ

Æ. 24 mm. α, β, γ. Berlin (*Pl.* XII. 11 = γ). δ. Loebbecke (= *Z. f. N.*, x., p. 81, No. 48). ε. London (same dies as δ). ζ, η. London. θ. Paris, Waddington (*Invent.* 4425, same dies as γ). ι. Paris, Waddington (*Invent.* 4426). κ. Weber.

All the above coins are from one obverse die, viz., the die of No. 12.

M. ANTONIUS POLEMO.

YEAR 10.

1. [M]APKANT[Ω]NIO[Y]ΠΟΛΕΜ[Ω]ΝΟΣΑΡ-
 ΧΙΕ - -] Bare head of Polemo r.

Rev.—ΔΥΝΑΣΤΟΥΟΛΒΕΩΝΤΗΣΙΕΡΑΣΚΑΙ
[ΚΕ]ΝΝΑΤΩΝ in outer circle, ΚΑΙΛΑ-
ΛΑΣΣΕΩΝ<Ι·ΕΠ[Ι] in inner circle,
ΝΕΩΝΟΣ in straight vertical line. Sacred
throne, three-quarters l.

Æ. 24 mm. α. Paris (Waddington, *Mél.*, ii., p. 121,
No. 1; Pl. XII. 14).

2. ΜΑΡΚΑΝΤΩΝΙΟΥΠΟΛ[ΕΜΩΝΟΣ·ΑΡΧΙΕΡΕ]
ΩΣ Bare head of Polemo r.

Rev.—ΔΥΝΑΣΤΟΥΟΛΒΕΩΝΤΗΣΙΕΡΑΣΚΑΙ-
ΚΕΝΝΑΤΩ Thunderbolt.

ΚΑΙ
ΛΑΛΑΣΣΕΩ
← Ι
ΕΠΙΝΕΩΝΟ (in curved line)

Æ. 23—25 mm. α. Loebbecke (*Z. f. N.*, x., p. 81;
xii., p. 335). β. London (same dies as α).
γ. Paris. Pl. XII. 15.

All three of these coins are from the same obverse die.

YEAR 11.

3. [ΜΑΡΚ]ΑΝΤΩΝΙΟΥΠΟΛΕΜΩΝΟΣΑΡΧΙΕ--
Bare head of Polemo r.

Rev.—ΔΥΝΑΣΤΟΥΟΛΒΕΩΝΤΗΣΙΕΡΑΣΚΑΙ
ΚΕΝΝΑΤ in outer circle, ΚΑΙΛΑΛΑΣΣΕ
ΩΝ<ΙΑ in inner circle. Sacred throne,
three-quarters r.; in field l., triskeles r.

Æ. 26 mm. α. Berlin. β, γ. London (both from same
dies as α). δ. Paris, Waddington (*Mél.*, ii., p.
121, No. 2 = *Inrent.* 4411, Pl. XI. 5, same dies
as α, Pl. XII. 16). ε. Paris (Mionnet, iii., p. 597,
No. 273 = Langlois, *R. N.*, 1854; Pl. III. 18).

All these coins are from one obverse die, the same as that used
for No. 1.

4. ΜΑΡΚΑΝΤΩΝΙΟΥΠΟΛΕΜΩΝΟΣΑΡΧΙΕΡΕΩΣ

Bare head of Polemo r.

Rev.—ΔΥΝΑΣΤΟΥΟΛΒΕ[ΩΝΤΗΣ]ΙΕΡΑΣΚΕΝ
 ΝΑΤΩ· in outer circle, ΚΑΙΛΑΛ[Α Σ]ΣΕΩΝ
 in inner circle; in field ← ΙΑ. Winged thunder-
 bolt.

Æ. 23—25 m.m. α. Berlin (same *obv.* die as 2; Pl. XII. 17). β. Paris, Waddington (*Invent.* 4412, same dies as α). γ. Paris (Waddington, *Mél.*, ii., p. 122, No. 3). δ. *Pembroke Catal.*, 1004.]

The coin described by Mionnet (No. 272, *Suppl.*, No. 819) is evidently, as Waddington suggests, a misread coin of Ajax.

The coins of Ajax with the head of Augustus are dated year 1 and year 2. Those with the head of Tiberius are of year 5. No coins of year 3 or year 4 are known. Did the third and fourth years of Ajax fall in the reign of Augustus (who died on Aug. 19, A.D. 14), or in that of Tiberius? If in the former, the absence of a coinage in these two years is easily explained, since the coins with the head of Augustus, whatever their date, might well serve during his lifetime, whereas the accession of Tiberius would be a fitting occasion for the issue of a new coinage with the head of the new Emperor. Until coins with the dates 3 and 4 are discovered, we may regard it as highly probable that Ajax reigned from 10/11 to 14/15 A.D.

From the coins of Polemo, there is no possibility of ascertaining what dates correspond to the tenth and eleventh years of his reign.

The coins of the two high-priests bear a very strong resemblance to each other. The coins of Polemo, like many of those of Ajax, are usually struck on flans too small for the die. The legends of the outer circles

have therefore to be made out by combining various specimens. The forms A and E are constant on both series and < or some form closely allied to it is always used with or without T, as the abbreviation of ἔτους.²⁶ Polemo uses both C and Σ, Ajax only Σ. As regards fabric, the coins of Polemo are somewhat unusually thick, but both series are alike in having a bevelled edge. As regards types and symbols, they agree in using the thunderbolt and triskeles. The sacred throne, which occurs on Polemo's coins, and is also an autonomous type of Olba, is unknown to Ajax.

The fact that the name of Olba does not occur on any coins of Ajax, raises the question whether Ajax really ruled over Olba, or whether Ramsay is right in supposing the contrary. The resemblance of his coins to those of Polemo cannot be due to imitation, since, as we shall see, Polemo's coins are the later, and the resemblance is so minute that numismatists are quite united in assigning them without hesitation to the same mint. The absence of the mint-name is due to another cause. The importance of these hereditary ἀρχιερεῖς of Olba was so great, that it was as unnecessary to mention the name of their seat as it was, to take an instance from Cilicia, for Tarcondimotus to say of what country he was king. This was especially the case with a man whose name was Αἴας Τεύκρου, in view of the prevalence of these names in the dynasty. On the other hand, the toparchia of Lalassis

²⁶ This form of ε is not to my knowledge found on any other coins. On papyri it is common to find the ordinary cursive ε combined with τ in a similar way. The form < occurs in lapidary inscriptions, e.g., in the graffito from Der el Bahari, *J. H. S.* xix. p. 15, No. 9; cf. the combination of ε and ι, *ibid.*, No. 11.

and Cennatis was doubtless an extraordinary office, and therefore, necessary to be mentioned. With Polemo the case was different. He was, as we shall see, an outsider, and it was consequently necessary for him to define his position more clearly on his coinage.

The absence of the throne-type from the coins of Ajax is more difficult to explain. But that it was not so closely connected with Olba as the thunderbolt is suggested by the fact that it disappears from the imperial coinage of Olba, while the thunderbolt remains.²⁷ It is worthy of notice that all the coins I have seen with the throne on the reverse share one and the same obverse die, which is different from the obverse die common to the thunderbolt coins.²⁸ This fact seems to indicate that the two reverse types belong to different mints, or at least different officinae. But there are such strong objections to separating the two series, that I merely note the peculiarity of the disposition of the dies without further speculation. Another problem is the explanation of the Hermes-type on the coins of Ajax. Does it point to the inclusion under his sway of Corycus, where especially in Cilicia the cult of Hermes was localised?

It remains to consider whether it is possible to attribute the coins of the dynast Polemo to a fixed date, or to a person otherwise known. Polemo I of Pontus died about 8 B.C., and Polemo II, whose coins issued for this part of Asia Minor we have already considered, did not come into the field until 41 A.D. But it is difficult to

²⁷ The throne is of course the throne of Zeus, or of his representative the thunderbolt (cf. the coins of Diocæsarea, *Head, Hist. Num.* p. 602, and of the Syrian Larissa and Seleucia, *Brit. Mus. Cat., Galatia, etc.*, Pl. XXXI. 8, XXXII. 6, 8).

²⁸ Nos. 4 γ and 4 δ may possibly be exceptions.

place a great interval between the coins of the dynast and those of Ajax, which they so closely resemble. This is one of the chief objections to the traditional theory which sets back the coinage to the time of the triumvir, M. Antonius. Certainly the names of the dynast seem to point to some connexion with the triumvir, and it has generally been supposed that he was his client. It is, known, further, that in 39 B.C. M. Antonius established one Polemo as king of "a part of Cilicia,"²⁹ which probably included Lycaonia, with its capital Iconium.³⁰ That this Polemo is identical with the M. Antonius Polemo, dynast of Olba, is hardly possible, since such an identification places an interval of some forty years between the coins of M. Antonius Polemo and the very similar coins of Ajax. The triumvir's protégé is without doubt the Zenonid king of Pontus. Since we know that the names M. Antonius were borne by members of the Zenonid family, it may be taken as fairly certain that the dynast of Olba belonged to that family.³¹

Most of the high priests of Olba, says Strabo in his somewhat detailed account of the affairs of that principality (xiv. p. 672), bore the names of Ajax and Teucer. He adds that after the settlement of the disturbances with which the name of Aba is associated τοῖς ἀπὸ τοῦ γένους διέμεινεν ἡ ἀρχή. In the light of these two statements, it is excessively improbable that the immediate accession to the high-priesthood of a Polemo, even if he were a member of the γένος, and not (as we have seen is more

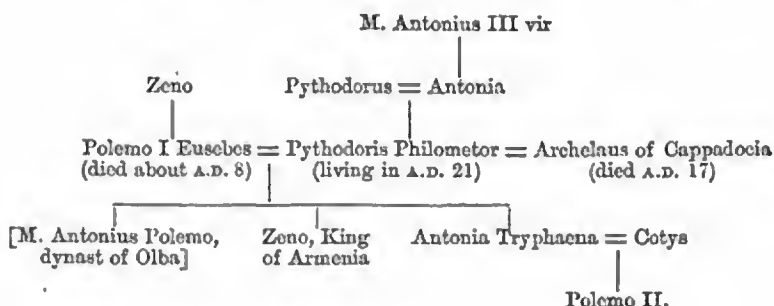
²⁹ Appian, *B. C.* v. 75.

³⁰ Strabo xii. 568.

³¹ The coincidence of another Polemo, not a Zenonid, bearing the names of M. Antonius, cannot be assumed without definite historical support.

probable) of the Zenonid family, should have been passed over in silence by Strabo. All the evidence, historical and numismatic, therefore goes to show that the high-priesthood of Marcus Antonius Polemo must be placed somewhat later. Is it possible to place it immediately or shortly before that of Ajax? So far as the fabric and style of the coins is concerned, the answer is in the affirmative, although the greater prevalence of the circular legends on Polemo's coins is, *ceteris paribus*, an argument in favour of putting them after the coins of Ajax. It must be remembered however that, unless there was some political disturbance, Ajax ought to have been immediately preceded by his father, Teucer. Further, if we give Polemo's coins to this time, we have to choose between a Zenonid and a non-Zenonid M. Antonius Polemo. That a non-Zenonid of these precise names should have held an important position in Asia Minor at this time, I have already characterised as a coincidence not lightly to be assumed. Is he then a Zenonid? Now Mommsen³² has shown that it is highly improbable that a Zenonid of these names can have existed so early. The ordinary explanation of the names M. Antonius Polemo in that family derives them from a grant of the Roman citizenship to Polemo I by the triumvir. But as Mommsen points out, "*cuiusmodi denominatio num ante stabilitum Romae imperium regi extero non infimi ordinis satis conveniat, dubitari potest.*" The origin of the names is, as he says, to be sought elsewhere, to wit, in the fact that Pythodoris, wife of Polemo I, was a daughter of Antonia and grand-daughter of M. Antonius. Her family relations and descendants are shown in the following tree:—

³² *Ephem. Epigr.* i. p. 275.



Antonia was regarded as the foundress of the stock, and the names of herself and her father would rightly be perpetuated in her descendants. Mommsen holds accordingly that among the Zenonids the names M. Antonius could only be possessed by those who were descendants of Pythodorus. Pythodorus had two sons by Polemo, of whom ὁ μὲν ἰδιώτης συνδιώκει τῇ μητρὶ τὴν ἀρχήν, ὁ δὲ νεωστὶ καθέσταται τῆς μεγάλης Ἀρμενίας βασιλεὺς (so Strabo writes, xii. 3, 29, p. 556, about 19-22 A.D.). The latter was called Zeno (Tacitus, *Ann.* ii. 56, and *Ephem. Epigr.* i. p. 270). What was the name of the other son, and what became of him after the time which Strabo describes? That his name was M. Antonius Polemo is highly probable, since he was apparently the elder of the two sons of Polemo and Pythodorus, and the younger was called Zeno. Further, it does not appear that he was dead when Strabo was writing (otherwise why did Strabo not say so?); on the other hand Strabo uses the past imperfect tense, which shows that he no longer was in the position he had occupied. Does it not seem highly probable that he is the Marcus Antonius Polemo of Olba? Pythodorus married Polemo I about B.C. 12. In A.D. 36, the district of Cetus was subject to Archelaus the younger, who

raised a revolt by attempting to take a census after the Roman fashion.³³ The eldest son of Pythodoris and Polemo at this time would not be more than forty-six years of age. The portrait on the coins of the dynast of Olba is that of a middle-aged person. So far as chronology is concerned, there is, therefore, nothing to prevent our identifying the dynast with the nameless eldest son of Pythodoris and Polemo. If we can suppose that Strabo would pass over his establishment as dynast and high-priest of Olba as not being of sufficient importance to merit a digression (which is unlikely), or if we accept Ramsay's theory of a dislocation of the text of Strabo, to be described below, we may place M. Antonius Polemo's accession soon after the end of Ajax' rule; possibly at the time when the deposition of Archelaus I of Cappadocia (A.D. 17) caused important changes in this part of Asia Minor. This would make him about thirty-eight or thirty-nine in the tenth and eleventh years of his rule. If, on the other hand, it is felt that the dislocation theory is unlikely, and that Strabo would not have passed over such a change in silence, we must make his rule begin after the time of Strabo's writing. In any case there is plenty of room, between the completion of Strabo's work and A.D. 36, for the eleven years of Polemo's tenure of the high-priesthood. And in any case, also, there is not so long an interval between Ajax and Polemo as is necessitated by the early date traditionally assigned to the latter—a date which on numismatic grounds is equally objectionable, whether the dynast is identified with the King of Pontus (Polemo I Eusebes), or is supposed to be merely a contemporary.

³³ Tacitus, *Ann.* vi. 41, where, as Wilhelm has shown, we must read *Cietarum natio* (above, p. 185, note 13).

This identification of the dynast of Olba with the eldest son of Polemo I and Pythodoris has been anticipated, as I have already said, by Ramsay.³⁴ He supposes that the words *δυναστεύει δ' ὁ πρεσβύτατος αὐτῶν*, which in the text of Strabo (xii. 556) relate to the eldest son of Cotys and Tryphaena, were a marginal addition by the author referring to the elder son of Polemo I and Pythodoris, and originally read *πρεσβύτ(ερ)ος*. When this addition crept into the text in the wrong place, the comparative was altered to the superlative. This ingenious suggestion, however, as its author recognises, is not absolutely necessary to the identification proposed.

It is probable that most of the autonomous coins of Olba, reading simply **ΟΛΒΕΩΝ**, belong to a later date than the coins of the high-priests. Von Sallet, it is true, has published a coin which he describes as "obviously struck before the coins of the dynasts, as the style shows." There is a similar specimen in the British Museum:—

Obv.—Throne of Zeus, three-quarters r.; in field l., **EP**; border of dots.

Rev.—**ΟΛΒΕΩΝ**. Winged thunderbolt; in field l., **IN**

Æ. 23 mm. α. Brit. Mus. β. Berlin (von Sallet, *Z. f. N.* xii. p. 369, from same obverse die as α, and with same letters, not a monogram, on the reverse).

Although the adverb "obviously" may be regarded as somewhat too strong, it seems more advisable to give these coins to the period before the coinage of the high-priests than to any period in the first century A.D., which alone is otherwise open to them. They bear little resemblance

³⁴ *Church in the Roman Empire*, p. 427, and in *Hastings' Dictionary of the Bible*, ii. p. 86.

to the coins either of the high-priests or of Polemo II, or of the Lasseis and Cennatae under Domitian.

The Imperial coinage of Olba begins with the Emperor Hadrian. To his time Mr. Wroth has attributed the quasi-autonomous coin of the following types:—

Obv.—Club tied with fillet; border of dots.

Rev.—ΟΛΒΕ | ΩΝ in two straight lines. Crenellated tower. Border of dots.

Æ. 18 mm. *a.* Brit. Mus. (Wroth, *Num. Chron.*, 1891, p. 16, Pl. IV. 11). *b.* Paris (Babelon, *Invent. Wadd.*, 4432).

Mr. Wroth calls attention to the fact that the club, which is a common symbol in the Olban district, actually occurs on the "tall castle" at Uzundja-burdj, which is represented on the reverse of this coin.³⁵

The chief interest of the later Imperial coins of Olba lies in a comparison with those of Diocaesarea. The latter city seems to have engaged in a rivalry with the former, which, though on a smaller scale, calls to mind the attempts of Anazarbus to emulate Tarsus. Both cities had the title ΑΔΡΙΑΝΩΝ, and the title ΑΔΡΙΑΝΩΝ ΔΙΟΚΑΙΣΑΡΕΩΝ ΜΗΤΡΟ ΚΕΝΝΑΤΙΔΟΣ looks like an imitation of ΑΔΡ. ΑΝΤ. ΟΛΒΕΩΝ ΜΗΤ. ΚΗ. Diocaesarea took the title of metropolis of Cennatis as early as the reign of Commodus.³⁶

In these circumstances, it is difficult to explain the meaning of the coin of Geta struck at Olba, of which the following is the description:—

³⁵ For the castle, see Bent, *J. H. S.* xii. p. 220; Heberdey-Wilhelm, *Reisen*, p. 84.

³⁶ Babelon, *Invent. Wadd.* 4266.

Obv.—ΠΟC -- [ΓΕΤΑC]ΚΑΙCΑΡ. Bust of Geta r., wearing radiate crown and cuirass.

Rev.—ΟΛΒ[ΕΩΝ --]ΚΕΝΝ. Dionysos, nude, standing to l., with thyrsos and kantharos; at his feet, panther l.

Æ. 25 mm. Brit. Mus. Bought by Prof. Ramsay at Tyana.

In spite of the parallel of Tarsus and Anazarbus, it would be rash to supply the gap in the inscription of this badly-preserved coin with ΜΗΤΡΟ. Nevertheless, since it can hardly be an alliance coin, I can make no other suggestion.³⁷

The occurrence at Diocaesarea of the thunderbolt and throne of Zeus was probably not due to mere imitation of Olba, but to the importance of the cult of the god whose name is embodied in that of the city.

A subtle form of emulation is embodied in the inscription ΟΛΒΟΞ on a Diocaesarean coin of Marcus Aurelius,³⁸ which contains an allusion to the name of the rival city. It is written against the figure of Zeus, who is attacking a giant. "Ολβιος, as an epithet of Zeus, should properly mean the giver of prosperity, and as such it is used by Aeschylus ("Αναξ ἀνάκτων, μακάρτατε καὶ τελείων τελειότατον κράτος, ὄλβιε Ζεῦ, *Suppl.* 524—526), and in a dedication from the Thracian Chersonesus (*C. I. G.* 2017). Just as we find Ζεὺς Σολυμεύς and Ζεὺς Σόλυμος side by side (*Journ. Hellen. Studies* xv., 1895, p. 127, cf. *Brit. Mus. Cat., Lycia*,

³⁷ The coin of Philip Senior catalogued by Babelon under Olba with the inscription ΑΔΡΙ . . . ΚΕΝΝΑΤ and the type of two Tychai (*Invent. Wadd.*, 7165), should probably be given to Diocaesarea.

³⁸ Imhoof-Blumer, *Z. f. N.* xiii. (1885), p. 134, Pl. IV. 9; Ramsay, *Hist. Geog.* p. 364.

&c., p. xc.), so the abstract word ΟΛΒΟΞ on the coin of Diocaesarea is the equivalent of Ζεὺς Ὀλβιος. But, as Ramsay has pointed out, there is in this word ΟΛΒΟΞ a further allusion to the rival city of Olba. As a matter of fact, although the proper ethnikon formed from Ὀλβα was Ὀλβεύς, the epithet Ὀλβιος was used, as we know from inscriptions,³⁹ of the Zeus of Olba, evidently with something of both meanings.

It may be convenient to add a chronological table of the history of Olba, Cennatis and Lalassis from the time that coins began to be issued for this district.

End of First Century B.C.—Autonomous coins with ΟΛΒΕΩΝ and magistrates' initials.

A.D. 10/11—14/15.—Government of Ajax, high-priest [of Olba] and toparch of Cennatis and Lalassis; coins of his years 1, 2, and 5.

A.D. 17—36.—Between these dates, government of M. Antonius Polemo, high-priest and dynast of Olba, Cennatis, and Lalassis; coins of his years 10 and 11.

A.D. 36.—Cetis under Archelaus of Cappadocia. Revolt of its inhabitants.

A.D. 37.—Tracheotis and Eastern Lycaonia given to Antiochus IV of Commagene.

A.D. 41.—Olba, Cennatis and Lalassis given to Polemo II, king of Pontus.

A.D. 41—74.—Polemo II between these dates strikes coins for the κοινὸν Λαλασίων καὶ Κεννατῶν, probably about 68 A.D.

A.D. 68.—Polemo II strikes a coin with the head of the Emperor Galba.

³⁹ Dedications: at Kanitelaideis (*J. H. S.* xii., p. 226) Διὶ Ὀλβίῳ ἱερεὺς Τεύκρος Ταρκνάριος. At Olba itself, Heberdey and Wilhelm, *Reisen in Kilikien*, p. 85, No. 166: ἀρχιερεὺς μέ[γ]ας Τεύκρος Ζηνοφάνους [τοῦ] Τεύκρου Διὶ Ὀλ[β]ίῳ.

A.D. 74—81.—Provincial coins, with the head of Domitian as Cæsar, struck between these dates by the *κοινὸν* of Lalassis and Cennatis.

Reign of Trajan.—Beginning of the Imperial Coinage of Diocaesarea.

Reign of Hadrian.—Beginning of the Imperial Coinage of Olba.

Reign of M. Aurelius.—The peoples of Olba and Diocaesarea take the title *Ἀδριανοί*, and Olba is called metropolis of Cetus.

Reign of Commodus.—Diocaesarea called metropolis of Cennatis.

Reign of Caracalla and Geta.—The coinage of Olba ceases at this time; a coin of Geta reads **ΟΛΒ[ΕΩΝ - -] KENN.**

Reign of Philip Sen.—Coinage of Diocaesarea now ceases.

G. F. HILL.

IX.

ESSAI DE CLASSIFICATION CHRONOLOGIQUE DES ÉMISSIONS MONÉTAIRES DE L'ATELIER D'ANTIOCHE PENDANT LA PÉRIODE CONSTANTINIENNE.

(Voir Planche XIII.)

LES travaux de de Salis, de Hettner, de Fr. Kenner, de O. Voetter ont montré le parti que l'on peut tirer de l'observation des exergues, et des lettres et signes placés dans le champ des monnaies, à leur revers, pour la distinction des émissions d'un même atelier à la fin du 3^me et au 4^me siècle. Hettner en particulier, dans ses remarquables publications sur les trésors de monnaies romaines trouvés dans les provinces rhénanes,¹ a donné une classification chronologique des émissions de Trèves à cette époque, fondée principalement sur l'observation des exergues et des lettres et signes en question. Il y a joint quelques notes très utiles sur les poids des monnaies et c'est sur ce point que je voudrais revenir. L'ensemble de l'exergue et des lettres et signes qui peuvent se trouver au revers d'une monnaie du IV^me siècle permet généralement de la

¹ T. Hettner, *Römische Münzschatzfunde in den Rheinlanden*, *Westdeutsche Zeitschrift f. Gesch. u. Kunst*. Trier, 1887, Jahrg. vi., Heft ii.; 1888, J. vii., H. ii.

classer dans une émission en tenant compte du règne sous lequel elle a été frappée. Néanmoins il peut se faire qu'un tel ensemble se reproduise plusieurs fois sur des monnaies de bronze, sous un même règne et dans la série des émissions d'un même atelier, mais cette répétition se montre dans des émissions dont les pièces sont de poids nettement différents. De là résulte l'intérêt tout spécial qui s'attache au poids de ces pièces pour leur classement. Le cas se présente également où des séries de monnaies de bronze frappées successivement au cours d'une même émission se distinguent par un changement de poids, ce qui permet de préciser leur époque d'apparition. C'est ce qui a lieu pour les deux séries de *folles* qui présentent à leurs revers l'ensemble de lettres suivant $\frac{|A}{ANT}$ à $\frac{|I}{ANT}$ et sont frappées en 307 et 308 à Antioche.

La première qui contient encore Sévère Auguste, mort en 307, est composée de *folles* pesant une moyenne de 10 grammes et la seconde qui comprend déjà Licinius Auguste, élu le 8 Novembre 308, offre des pièces qui n'ont plus en moyenne que 7 grammes. On voit par ce fait quelle précision l'indication des poids donne à la classification chronologique des monnaies.

Le type du revers des monnaies mérite également d'être décrit dans une classification chronologique. Il arrive en effet : 1°, qu'un même type se continuant d'une émission dans une autre confirme leur ordre successif ; 2°, que le type comme la légende caractérise une époque ; enfin 3°, que des monnaies différentes à d'autres égards puissent être rapprochées en raison de la similitude de leurs types du revers. C'est par ce moyen qu'on s'éclaire le sens de légendes qu'on peut rapprocher d'autres qui ont été frappées en même temps, comme la

légende "Claritas Reipublicae" des Césars frappée à Rome avec "Soli Invicto" pour Constantin; comme la légende "Genio Imperatoris" contemporaine des "Genio Caesaris" qui offrent le même type.

Pour la distinction des espèces monétaires, l'on trouvera complètement adoptées dans ce travail les conclusions du très remarquable ouvrage du professeur O. Seeck : *Die Münzpolitik Diocletians und seiner Nachfolger*.² Les termes employés pour désigner les monnaies de bronze seront en conséquence ceux de follis, de denier et de centenionalis.

Les abréviations suivantes seront usitées dans ce travail. BR. M. = British Museum; FR. = cabinet de France; H.M.V. = Hof Museum, Vienne; T. = Turin, Regio Museo. Quand aucun musée n'est indiqué, c'est qu'il s'agit d'une pièce vue dans une collection particulière.³

PREMIÈRE ÉMISSION.

Lettres dans le champ et exergue.

$\frac{|A|}{\text{ANT.}}$	$\frac{|B|}{\text{ANT.}}$	$\frac{|Γ|}{\text{ANT.}}$	$\frac{|Δ|}{\text{ANT.}}$
$\frac{|e|}{\text{ANT.}}$	$\frac{|S|}{\text{ANT.}}$	$\frac{|Z|}{\text{ANT.}}$	$\frac{|H|}{\text{ANT.}}$

Cette émission est de l'année 306; elle offre au revers : GENIO POPVLI ROMANI; et comme type, le Génie,

² *Zeitschrift für Numismatik*, xvii., p. 36 et seq., 115 id.

³ Les pièces du cabinet de France portent les Nos. de la collection; celles du British Museum n'ont pas de Nos., la collection étant rangée par ordre d'atelier. Le poids est indiqué en grammes, gr., et le diamètre en millimètres, m.m.

coiffé du modius, à demi-nu debout à gauche, le manteau rejeté, tenant une patère et une corne d'abondance. Ce revers existe avec les légendes suivantes au droit :

1. IMP. C. FL. VAL. CONSTANTIVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 102, BR. M.
2. IMP. C. GAL. V. MAXIMIANVS P. F. AVG. Même tête. Cohen, No. 80 ; BR. M. ; FR. 8-618 à 8-620, 9 grammes, 80 cent. ; 25 millim. [Pl. XIII., No. 1.]
3. FL. VAL. CONSTANTINVS NOB. CAES. Avec sa tête laurée à droite. BR. M. ; pièce inédite.
4. GAL. VAL. MAXIMINVS NOB. CAES. Même tête. Cohen, No. 81 ; BR. M. 10 gr. 55 ; 29 m.m.
5. FL. VAL. SEVERVS NOB. CAES. Même tête. Cohen, No. 27, BR. M.
6. IMP. C. FL. VAL. SEVERVS P.F. AVG. Même tête. Cohen, No. 31 ; H.M.V. 25-083.

On trouve également deux points au lieu d'un à droite de l'exergue.

Au revers.—VIRTVS EXERCITVS, et comme type : Mars vêtu de la tunique et le manteau flottant, marchant à droite, portant une haste et un trophée ; ayant au bras gauche un bouclier.

Au droit.—IMP. C. GAL. MAXIMIANVS P.F. AVG. Avec sa tête laurée à droite. FR. 8-680 ; 8 gr. 57 ; 25 m.m.⁴ Cohen No. 214.

Toutes ces pièces sont du poids et du diamètre du follis tel qu'on le frappait à la fin du règne de Dioclétien.

Les monnaies de Constance I Auguste se rencontrent avec celles de Constantin César qui lui succéda après sa

⁴ Les poids indiqués sont des poids réels, souvent inférieurs au poids moyen à cause de l'usure des pièces.

mort, le 25 Juillet 306. C'est donc en 306 avant et après la date du 25 Juillet que fut frappée l'émission. On y trouve en conséquence, les effigies de quatre empereurs qui régnaient avant cette date: Constance I et Galère Augustes, Maximin et Sévère Césars, et l'on y rencontre de même celles de quatre empereurs qui gouvernèrent l'empire après la mort de Constance; Galère et Sévère comme Augustes, Maximin Daja et Constantin comme Césars. Sévère fut reconnu en effet Auguste par Galère en même temps que Constantin César.

DEUXIÈME ÉMISSION.

$\frac{|A}{ANT}$	$\frac{|B}{ANT}$	$\frac{|Γ}{ANT}$	$\frac{|Δ}{ANT}$	$\frac{|Ε}{ANT}$
$\frac{|S}{ANT}$	$\frac{|Z}{ANT}$	$\frac{|H}{ANT}$	$\frac{Δ|Ε}{ANT}$	$\frac{|I}{ANT}$

Cette émission est de 307—308. Elle présente d'abord comme la précédente la légende du revers: GENIO POPVLI ROMANI, avec le même type.

Au droit. 1.—IMP. C. FL. VAL. SEVERVS P.F. AVG.

Avec sa tête laurée à droite. Cohen, No. 31; FR. 8.734; 10 gr.; 29 mm.

2. GAL. VAL. MAXIMINVS NOB. CAES. Même tête.

Cohen, No. 81; FR. 8.858; BR. M.; 10 gr.; 29 m.m.

3. FL. VAL. CONSTANTINVS NOB. CAES. Même

tête; pièce inédite; BR. M., 30 m.m.

4. Il doit exister une pièce pareille de Galère Auguste qui régnait en même temps.

On trouve au revers VIRTVS EXERCITVS, avec le type déjà décrit.

Au droit.—IMP. C. GAL. MAXIMIANVS P.F. AVG.
Avec sa tête laurée à droite. Cohen, No. 214,
FR. 8-680; 9 gr.; 26 m.m.

Après la mort de Sévère, on voit paraître les pièces suivantes :

Au revers.—GENIO IMPERATORIS. Avec le génie à demi-nu, debout à gauche, coiffé du modius, tenant une patère et une corne d'abondance et un autel allumé aux pieds du génie à gauche.

Au droit. 1.—IMP. C. GAL. VAL. MAXIMIANVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 48, BR. M.; 7 gr.; 25 m.m.

2. IMP. C. LIC. LICINIVS P.F. AVG. Même tête. Cohen, No. 47. H.M.V. Collection du comte de Westphalen.

Au revers.—GENIO CAESARIS. Avec le même type que le "Genie Imperatoris," mais sans autel allumé aux pieds du génie.

Au droit. 1.—GAL. VAL. MAXIMINVS NOB. CAES. Avec sa tête laurée à droite. Cohen, No. 44, BR. M.

2. FL. VAL. CONSTANTINVS NOB. CAES. Même tête. Cohen, No. 188; BR. M. pièce inédite.

Avec le même revers, mais avec un autel allumé aux pieds du génie.

Au droit. 1.—GAL. VAL. MAXIMINVS NOB. CAES. Même tête. Cohen, No. 40; FR. 8-823; 6 gr. 25; 23 m.m. [Pl. XIII., No. 2.]

2. FL. VAL. CONSTANTINVS NOB. CAES. Même tête; pièce inédite, BR. M.

Au revers.—VIRTVS EXERCITVS. Avec le type déjà décrit.

Au droit.—GAL. VAL. MAXIMINVS NOB. CAES. Avec sa tête laurée à droite. Cohen, No. 202; FR. 8-911 à 8-915; 6 gr. 55; 24 m.m. [Pl. XIII., No. 3.]

Au revers.—VENERI VICTRICI. Et comme type Vénus debout à gauche tenant une pomme et soulevant son voile.

Au droit.—GAL. VALERIA AVG. Avec son busto diadémé et drapé à droite. Cohen, No. 2; FR. 8.696, 7 gr. 05; 25 m.m.; BR. M.

Sévère apparaît avec le titre d'Auguste dès le début de cette émission. Or il ne fut élevé à ce rang par Galère quo quelque temps après la mort de Constance I, qui eut lieu à Eboracum en Bretagne le 25 Juillet 306. C'est donc à la fin de 306 ou en 307 que commença à être frappée cette émission dont la première série de folles se compose de pièces pesant de 10 grammes 50 cent. à 9 grammes. Cette série cesse avant la mort de Sévère, qui périt en Italie au mois de Mars ou d'Avril 307.⁵

Dans la seconde partie de l'émission, on ne trouve plus l'effigie de Sévère, et l'on voit apparaître au contraire Licinius, qui fut reconnu Auguste par Galère le 11 Novembre 308.⁶ Cette partie de l'émission commence donc après la mort de Sévère en 307 et se continue après l'élévation de Licinius à la fin de 308. Elle se compose de folles pesant de 7 gr. 50 à 6 gr. 50; et c'est en conséquence en 307 ou 308 que l'on dut cesser à Antioche la frappe du follis de la plus grande espèce.

⁵ L'époque de cette mort est déterminée par le panégyrique d'Eumène, vi. 1; qui fut prononcé à l'occasion du mariage de Constantin et de Fausta le 31 Mars 307 (cf. C.I.L. 1, p. 397. commentaires de Mommsen). Ce panégyrique parle de la prochaine invasion de Galère en Italie, laquelle avait pour but de venger la défaite de Sévère qui précéda de peu de temps sa mort.

⁶ Idat. Fast.: Decies et Maximiano; his Conss.; quod est Maxentio et Romulo, levatus est Licinius Carnunto III Id. Nov. Cf. O. Seeck: *Die Anfänge Constantins d. grossen.* (*Deutsche Zeitschr. f. Geschichtsw.*, vii., p. 212).

TROISIÈME ÉMISSION.

$\frac{\text{Q}}{\text{A}}$	$\frac{\text{Q}}{\text{B}}$	$\frac{\text{Q}}{\text{F}}$	$\frac{\text{Q}}{\Delta}$	$\frac{\text{Q}}{\epsilon}$
ANT.	ANT.	ANT.	ANT.	ANT.
$\frac{\text{Q}}{\text{S}}$	$\frac{\text{Q}}{\text{Z}}$	$\frac{\text{Q}}{\text{H}}$	$\frac{\Delta}{\epsilon}$	$\frac{\text{Q}}{\text{I}}$
ANT.	ANT.	ANT.	ANT.	ANT.

Cette émission est de la première moitié de l'année 309. Elle présente au revers : GENIO IMPERATORIS ; avec le génie à demi-nu debout à gauche, coiffé du modius, tenant une patère et une corne d'abondance.

Au droit. 1.—IMP. C. LIC. LICINIVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 42 ; FR. 9.031 ; 6 gr. 50 ; 25 m.m.

2. IMP. C. GAL. VAL. MAXIMIANVS P.F. AVG. Même tête. Cohen, No. 48 ; FR. 8.514 à 8.518 ; 7 gr. 05 ; 24 m.m.

On trouve également :

Au revers.—VIRTVS EXERCITVS ; avec le type déjà décrit.

Au droit.—GAL. VAL. MAXIMINVS NOB. CAES. Même tête. Cohen, No. 202 ; FR. 8.913, 8.914 ; 6 gr. 30 ; 26 m.m.

Au revers.—VENERI VICTRICI. Avec le type déjà décrit.

Au droit.—GAL. VALERIA AVG. Avec son buste diadémé et drapé à droite. Cohen, No. 2.

Il faut y joindre la pièce suivante que je n'ai pas vue, mais qui est indiquée dans Schiller ⁷ comme se présentant

⁷ Schiller, *Geschichte d. Röm. Kaiserzeit*, ii., p. 173, indique la pièce comme étant de la collection du Comte de Westphalen.

avec $\frac{\begin{array}{|c} \Omega \\ \hline \epsilon \end{array}}{\text{ANT.}}$ au revers et qui répond à une pièce pareille frappée en même temps à Alexandrie.

Au revers.—GENIO CAESARIS. Avec le même type que le "Genio Imperatoris" décrit dans cette émission.

Au droit.—FL. VAL. CONSTANTINVS FIL. AVGG. Avec sa tête laurée à droite. Cohen, No. 185.

Cette première série de pièces est postérieure à l'année 308 qu'occupe entièrement l'émission précédente. Elle s'arrête avant le moment où Maximin et Constantin sont reconnus Augustes par Galère au cours de l'année 309.

La série suivante fut également frappée dans la première moitié de l'année 309.

$\frac{\begin{array}{|c} \cup \\ \hline A \end{array}}{\text{ANT.}}$ $\frac{\begin{array}{|c} \cup \\ \hline B \end{array}}{\text{ANT.}}$ à $\frac{\begin{array}{|c} \cup \\ \hline S \end{array}}{\text{ANT.}}$ et à $\frac{\begin{array}{|c} \cup \\ \hline I \end{array}}{\text{ANT.}}$

On trouve—

Au revers.—GENIO IMPERATORIS. Avec le revers décrit plus haut.

Au droit.—IMP. C. GAL. VAL. MAXIMIANVS P.F. AVG. Sa tête laurée à droite. Cohen, No. 48; FR. 8-514.

Au revers.—VIRTVS EXERCITVS. Avec le type décrit plus haut.

Au droit.—GAL. VAL. MAXIMINVS NOB. CAES. Même tête. Cohen, No. 202; FR. 8-911, 8-912; 6 gr. 30; 26 m.m.

Les folles de ces deux émissions ont un poids moyen de 6 à 7 grammes, un diamètre de 25 à 26 m.m.

Maximin Daja n'est apparu jusqu'ici qu'avec le titre

de César. Schiller⁸ a fait la remarque que Maximin ne laissa pas frapper dans ses états de pièces à son effigie avec le titre de "filius Augustorum," qu'il n'accepta pas pour lui, mais qu'il fit au contraire frapper sur les monnaies de Constantin.

On peut déterminer approximativement l'époque où Maximin fut reconnu Auguste par Galère. En effet une émission de *folles* frappée à Siscia dans les états de Licinius, allié de Galère, présente Constantin et Maximin "Filii Augustorum" avec Licinius Augustus. Elle est en conséquence postérieure à l'élévation de Licinius le 11 Novembre 308. C'est à ce moment, après avoir reçu de Galère ce titre de "Fil. Augg.," que Maximin entra en négociations avec lui⁹ pour obtenir celui d'Auguste, mais Galère refusa et des négociations s'en suivirent au début de 309. Le temps de ces négociations peut être évalué par la durée des émissions qui dans les diverses parties de l'empire contiennent des monnaies de Constantin ou Maximin "Filii Augustorum," à plusieurs mois. Enfin Maximin, las d'attendre, se fit proclamer Auguste par ses troupes et le fit savoir à Galère. Ces événements conduisent naturellement à l'époque qu'on peut fixer d'après l'építome de Victor pour la reconnaissance de Maximin Auguste, c'est à dire au mois d'Avril ou de Mai 309.¹⁰

⁸ Schiller, *loc. cit.* p. 173; d'après le Comte de Westphalen.

⁹ Cf. O. Seeck, *D. Anfänge Constantins d. Gros.*; dans la *Deutsche Zeitsch. f. Geschichtw.*, vii., p. 213; Lactant., *de Mort. Pers.*, 32.

¹⁰ Vict. Epit. 57 : Galerius Maximinus, Daja dictus, Caesar quadriennio. Comme il avait été élu César le 1^{er} Mai 305, c'est au mois d'Avril ou de Mai 309 que Daja dut d'après cet auteur être reconnu Auguste.

QUATRIÈME ÉMISSION.

$\frac{A}{\text{ANT}} *$	$\frac{B}{\text{ANT}} *$	$\frac{\Gamma}{\text{ANT}} *$	$\frac{\Delta}{\text{ANT}} *$	$\frac{e}{\text{ANT}} *$
$\frac{S}{\text{ANT}} *$	$\frac{Z}{\text{ANT}} *$	$\frac{H}{\text{ANT}} *$	$\frac{\epsilon}{\Delta} *$	$\frac{I}{\text{ANT}} *$

Cette émission, qui contient des mennaies de Maximin César et d'autres de Maximin et de Constantin Augustes, fut frappée par conséquent en l'année 309 ; année de l'élévation de Maximin au rang d'Auguste. Elle offre :

Au revers.—IOVI PROPAG. ORBIS TERRARVM.

Avec Maximin debout à droite, lauré et en toge, tenant une Victoire sur un globo ; à sa droite un autel allumé.

Au droit.—MAXIMINVS NOB. CAES. Son busto

lauré à droite à mi-corps avec le manteau impérial, tenant le foudre.¹¹ Cohen, No. 130 ; monnaie figurée p. 153, tome vii. ; FR. 8·883 ; 6 gr. 80 ; 24 m.m.

Au revers.—SOLI INVICTO COMITI. Avec le Soleil radié, debout à gauche, en robe longue, levant la droite et tenant la tête de Sérapis.

Au droit. 1.—IMP. C. GAL. VAL. MAXIMINVS P.F. AVG. Avec sa tête laurée, à droite. Cohen, No. 161 ; BR. M.

2. IMP. LIC. LICINIVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 160 ; BR. M.

Il faut sans doute y joindre le No. 159 de Cohen, avec "Imp. C. Val. Licin. Licinius P. F. Aug."

¹¹ La plupart du temps Cohen désigne comme la *mappa* ce qui n'est autre chose que le foudre de Jupiter que l'usure des pièces rend difficile à reconnaître.

3. IMP. C. FL. VAL. CONSTANTINVS P.F. AVG.
Même tête. Cohen, No. 507; FR. 14-871; 4
gr. 85; 20 m.m.

Au revers.—HERCVLI VICTORI. Avec Hercule nu,
debout à droite, appuyé sur sa massue, enve-
loppée de la peau de lion.

Au droit.—IMP. C. GAL. VAL. MAXIMINVS P.F.
AVG. Avec sa tête laurée à droite. Cohen,
No. 105; BR. M.

Galère se rencontre certainement dans cette série
puisqu'il se rencontre dans les autres séries contempo-
raines de la même émission.

Du milieu de 309, après la reconnaissance de Sévère
comme Auguste par Galère, au 5 Mai 311, date de la mort
de ce dernier, l'empire Romain eut en effet quatre
Augustes à sa tête : Galère, Licinius, Maximin et Con-
stantin.

$\frac{\cup}{\text{ANT}} \mid \text{A}$	$\frac{\cup}{\text{ANT}} \mid \text{B}$	$\frac{\cup}{\text{ANT}} \mid \text{F}$	$\frac{\cup}{\text{ANT}} \mid \Delta$	$\frac{\cup}{\text{ANT}} \mid \text{E}$
$\frac{\cup}{\text{ANT}} \mid \text{S}$	$\frac{\cup}{\text{ANT}} \mid \text{Z}$	$\frac{\cup}{\text{ANT}} \mid \text{H}$	$\frac{\cup}{\text{ANT}} \mid \frac{\text{E}}{\Delta}$	$\frac{\cup}{\text{ANT}} \mid \text{I}$

Cette seconde série est frappée également en 309 à 310,
car on y trouve Maximin César et Auguste; elle est donc
tout à fait contemporaine de la première, mais elle pré-
sente le type et la légende du "Genio Imperatoris," qui se
continueront en 310 dans une émission suivante. On trouve:

Au revers.—VIRTVS EXERCITVS. Avec Mars en
habit militaire et le manteau flottant, marchant
à droite, portant une haste et un trophée; et au
bras gauche un bouclier.

Au droit. 1.—IMP. C. GAL. MAXIMIANVS P.F. AVG.
Avec sa tête laurée à droite. Cohen, No. 214 ;
FR. 8-681 ; 6 gr. 60 ; 25 m.m.

2. GAL. VAL. MAXIMINVS NOB. CAES. Même tête.
Cohen, 202 ; 6 gr. 15 ; 24 m.m.

Au revers.—VENERI VIOTRICI. Avec Vénus debout
à gauche, tenant une pomme et soulevant son
voile ; à ses pieds à gauche un autel allumé.

Au droit.—GAL. VALERIA AVG. Avec son buste
diadémé et drapé à droite. Cohen, No. 10 ;
FR. 8-726 ; 7 gr. 30 ; 22 m.m.

Au revers.—GENIO EXERCITVS. Avec le génie
coiffé du modius, à demi-nu, debout à gauche,
tenant une patère et une corne d'abondance ;
à ses pieds à gauche un autel allumé.

Au droit. 1.—IMP. C. FL. VAL. CONSTANTINVS P.F.
AVG. Avec sa tête laurée à droite ; pièce inédite,
BR. M. ; 24 m.m.

2. IMP. C. GAL. VAL. MAXIMINVS P.F. AVG.
Même tête. Cohen, No. 49 ; FR. 8-827 ; 7 gr.
25 ; 22 m.m., BR. M. [Pl. XIII., No. 4.]

3. IMP. C. GAL. VAL. MAXIMIANVS P.F. AVG.
Même tête. Cohen, No. 46 ; FR. 8-504 ; 6 gr.
60 ; 22 m.m.

4. IMP. C. LIC. LICINIVS P.F. AVG. Même tête,
pièce inédite, BR. M.

Au revers.—GENIO IMPERATORIS. Avec le revers
déjà décrit, mais un autel allumé aux pieds
du génie en plus.

Au droit. 1.—IMP. C. FL. VAL. CONSTANTINVS P.F.
AVG. Avec sa tête laurée à droite. Cohen,
No. 194 ; BR. M. ; 23 m.m.

2. IMP. C. GAL. VAL. MAXIMINVS P.F. AVG.
Même tête. Cohen, No. 55 ; FR. 8-847 ; 7 gr.
45 ; 23 m.m.

3. IMP. C. GAL. VAL. MAXIMIANVS P.F. AVG.
Même tête. Cohen, No. 47 ; FR. 8-520.

Licinius ne peut pas manquer à cette série puisqu'il se trouve dans celle qui porte la légende "Genio Exercitus"; il faut probablement placer ici le No. 47 ou 48 de Cohen.

Ainsi qu'on vient de le voir, les groupes de pièces qui portent les légendes "Genio Exercitus" et "Genio Imperatoris" sont frappées postérieurement à l'élection de Sévère Auguste.

Une émission peu nombreuse dont je n'ai trouvé que les lettres suivantes au revers est également de 309 à 310. Je n'y ai pas trouvé jusqu'ici de Maximin César.

$$\frac{A|}{ANT}$$

$$\frac{Z|}{ANT}$$

$$\frac{S|}{ANT}$$

avec HERCVLI VICTORI au revers, et le type de l'Hercule debout à droite, appuyé sur sa massue, enveloppée de la peau de lion.

Au droit. 1.—IMP. C. GAL. VAL. MAXIMINVS P.F. AVG. Sa tête laurée à droite. Cohen, No. 105; FR. 8-868; 6 gr. 60; 21 m.m.

2. IMP. C. FL. VAL. CONSTANTINVS P.F. AVG. Même tête. Cohen, No. 279; BR. M.

3. Licinius Augustus doit être représenté dans cette émission par les Nos. 59 et 60 de Cohen, avec "Imp. C. Val. Licin. Licinius P. F. Aug."

4. Il en est de même pour Galère du No. 112 de Cohen, IMP. C. GAL. VAL. MAXIMIANVS P. F. AVG.; et sa tête laurée à droite; qui se trouve au cabinet de

France, No. 8-655, avec le sigle $\frac{\Omega|}{\Lambda|}$ et pèse 6 gr. 35; 23 m.m. On trouve:

Au revers.—SOLI INVICTO. Avec le Soleil radié, debout à gauche, en robe longue, levant la main droite et tenant la tête de Sérapis.

Au droit.—IMP. C. GAL. VAL. MAXIMINVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 161, BR. M. ; 6 gr. 60 ; 25 m.m.

Toutes les monnaies des diverses séries de cette émission pèsent de 6 gr. 50 à 7 gr. 50 ; ils ont de 22 à 24 m.m. de diamètre.

CINQUIÈME ÉMISSION.

$\frac{*|A}{ANT}$	$\frac{*|B}{ANT}$	$\frac{*|F}{ANT}$	$\frac{*|\Delta}{ANT}$
$\frac{*|E}{ANT}$	$\frac{*|S}{ANT}$	$\frac{*|Z}{ANT}$	$\frac{*|H}{ANT}$
$\frac{*|\epsilon}{ANT}$	$\frac{*|I}{ANT}$	$\frac{*|AI}{ANT}$	$\frac{*|BI}{ANT}$

L'atelier d'Antioche fonctionne à partir de cette émission avec au moins 12 officines comme le montre le tableau ci-dessus. Cette émission qui paraît dès l'année 310, est surtout de 311 ; elle comprend les monnaies de l'empereur Galère et Gal. Valéria, qui n'ont été frappées que jusqu'à la mort de Galère survenue au 5 Mai 311. Elle se termine quelque temps après la mort de cet empereur.

Elle offre au *revers* la légende : GENIO IMPERATORIS.

Avec le génie coiffé du modius, à demi-nu, debout à gauche, tenant une patère et une corne d'abondance ; à ses pieds à gauche un autel allumé.

Au droit.—IMP. C. GAL. VAL. MAXIMINVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 55 ; FR. 8-848—8-849 ; 7 gr. 40.

2. IMP. C. GAL. VAL. MAXIMIANVS P.F. AVG.
Même tête. Cohen, No. 47; FR. 8-534; 7 gr.
30; 24 m.m.

3. Le No. 194 de Constantin le Grand dans Cohen se retrouve, probablement, ici comme dans l'émission antérieure.

4. Il en est de même de Licinius; Coh., Nos. 47 et 48.

Au revers.—VENERI VICTRICI. Avec le type déjà décrit.

Au droit.—GAL. VALERIA AVG. Avec son buste diadémé et drapé à droite. Cohen, No. 10; FR. 8-727; 7 gr. 30; 22 m.m.

Au revers.—GENIO AVGVSTI. Avec le génie coiffé du modius, à demi-nu, debout à gauche, tenant une tête de Sérapis et une corne d'abondance.

Au droit. 1.—IMP. C. FL. VAL. CONSTANTINVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 173; BR. M.

2. IMP. C. GAL. VAL. MAXIMINVS P.F. AVG.
Même tête. Cohen, No. 18; FR. 8-787; 4 gr. 65; 22 m.m.

3. IMP. C. LIC. LICINIVS P.F. AVG. Même tête.
Cohen, No. 82; FR. 14-112; BR. M. [Pl. XIII., No. 5.]

4. La même pièce avec "Imp. C. Gal. Val. Maximianus P. F. Aug." est indiquée dans Cohen, No. 44, comme étant de l'atelier d'Antioche.

On trouve le même revers avec le même type, mais le Génie tenant une tête d'Apollon au lieu de la tête de Sérapis.

Au droit.—IMP. C. GAL. VAL. MAXIMINVS P.F. AVG. Même tête. Cohen, No. 21; FR. 13-997 à 14-003; 5 gr. 50; 22 m.m.

Au revers.—La même légende et comme type le même génie tenant une victoire sur un globe et une corne d'abondance.

Au droit. 1.—IMP. C. LIC. LICINIVS P.F. AVG.
Avec sa tête laurée à droite. Cohen, No. 36;
BR.M.; FR. 14.115; 5 gr.; 21 m.m.

2. IMP. C. FL. VAL. CONSTANTINVS P.F. AVG.
Même tête. BR.M., pièce inédite.

3. IMP. C. GAL. VAL. MAXIMINVS P.F. AVG.
Même tête. Cohen, No. 32; FR. 14.015 à
14.017, poids de 4 gr. 10 à 6 gr.; 22 m.m.

Au revers.—VIRTVTI EXERCITVS. Avec Mars marchant à droite, trainant un captif par les cheveux, armé d'un bouclier et portant un trophée.

Au droit.—IMP. C. GAL. VAL. MAXIMINVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 216; FR. 14.062; 5 gr. 40; 22 m.m.

Au revers.—IOVI CONSERVATORI. Jupiter nu, debout à gauche, le manteau déployé derrière lui, tenant une victoire sur un globe et appuyé sur un sceptre.

Au droit.—IMP. C. GAL. VAL. MAXIMINVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 116; 5 gr. 60; 22 m.m., BR.M. Cohen n'a par décrit de pièces semblables de Constantin et de Licinius.

Au revers.—IOVI CONSERVATORI AVGG. Avec Jupiter nu, debout à gauche, le manteau rejeté sur l'épaule gauche, tenant un globe surmonté d'une victoire et un sceptre.

Au droit.—IMP. LICINIVS AVG. Avec son busto lauré, drapé et cuirassé à gauche, tenant un foudre et un sceptre. Cohen, No. 112, mais avec une étoile dans le champ à droite au lieu d'une couronne; BR. M., 4 gr.

Une pièce semblable de Constantin I est décrite dans Cohen, No. 300. Les dernières pièces de cette émission

ont dû être frappées après la mort de Galère, dont je n'ai pas trouvé l'effigie sur les monnaies portant les légendes "Iovi Conservatori" et "Conservatori Augg." Les poids des *folles*, déjà tombés de 10 grammes à 7 grammes en 307 ou 308, s'abaissent à 5 gr. 50 et à 4 gr. au cours de cette émission. Les pièces qui portent les noms de "Imp. C. Gal. Val. Maximianus P. F. Aug." et de "Gal. Valeria Aug." pèsent encore près de 7 gr. 50. Il semble que ce fut principalement sous Maximin en 311, après la mort de Galère, que ce poids s'abaisse. L'absence de pièces de Gal. Valeria parmi ces monnaies du poids le plus faible vient confirmer le récit de Lactance, d'après lequel, Gal. Valeria fut sollicitée, après la mort de Galère, par Maximin, de l'épouser pendant le temps même de son plus grand deuil (c'est à dire, en l'année 311) et que sur son refus, celui-ci lui fit perdre son rang et l'exila.¹² On ne rencontre plus, en effet, le nom de Gal. Valeria sur les monnaies de poids réduit, frappées après la mort de Galère.

SIXIÈME ÉMISSION.

$\frac{|A|}{ANT}$	$\frac{|B|}{ANT}$	$\frac{|F|}{ANT}$	$\frac{|\Delta|}{ANT}$	$\frac{|E|}{ANT}$
$\frac{|S|}{ANT}$	$\frac{|Z|}{ANT}$	$\frac{|H|}{ANT}$	$\frac{|e|}{ANT}$	$\frac{|I|}{ANT}$
$\frac{|AI|}{ANT}$	$\frac{|BI|}{ANT}$	$\frac{|FI|}{ANT}$	$\frac{|\Delta I|}{ANT}$	$\frac{|EI|}{ANT}$

Cette émission est postérieure à la mort de Galère et

¹² Lactant., *de Mort. Pers.*, c. 39 et 40.

antérieure à celle de Maximin en Juin 313; elle dure de la seconde moitié de l'année 311 au début de 313. L'atelier d'Antioche fonctionne avec 15 officines. Le sigle d'exergues et lettres dans le champ qu'on trouve sur les pièces s'est déjà montré de 306 à 308, mais sur des folles d'un poids tellement supérieur qu'il est impossible de les confondre avec ceux-ci. On trouve :

Au revers.—IOVI CONSERVATORI AVGG. NN.
Jupiter nu, debout à gauche, tenant une victoire et un sceptre; à ses pieds un aigle tenant une couronne en son bec.

Au droit. 1.—IMP. CONSTANTINVS P.F. AVG. Avec son buste lauré et drapé à droite. Cohen, No. 312; FR. 14-736; BR. M.; 3 gr. 60; 22 m.m.

2. IMP. LIO. LICINIVS P.F. AVG. Même buste. Cohen, No. 125; FR. 14-232 à 14-241; 3 gr. 50, 22 m.m.; FR. 9-063; 3 gr. 77; 22 m.m.; BR. M. [Pl. XIII, No. 6.]

3. La pièce de Maximin Daja, No. 127 de Cohen, est exactement pareille; elle existe dans cette émission, car elle se trouve dans l'émission contemporaine de Siscia avec les mêmes Licinius et Constantin.

Ces pièces durent cesser d'être frappées dans les premiers mois de l'année 313. En effet c'est au mois d'Avril 313 qu'eut lieu la guerre entre Licinius et Maximin; la bataille de Tzirallum, où fut défait Maximin, est du 30 Avril 313.¹³

L'atelier de Siscia ferma à cette époque et Licinius ne le rouvrit qu'en 315.

¹³ Diei Kalendarum Maiarum (Lactant., c. 45).

SEPTIÈME ÉMISSION.

$\begin{array}{c} \text{Q} \\ \text{A} \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \text{B} \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \text{F} \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \Delta \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \epsilon \\ \hline \text{III} \end{array}$
ANT	ANT	ANT	ANT	ANT
$\begin{array}{c} \text{Q} \\ \text{S} \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \text{Z} \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \text{H} \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \Delta \\ \hline \epsilon \end{array}$	$\begin{array}{c} \text{Q} \\ \text{I} \\ \hline \text{III} \end{array}$
ANT	ANT	ANT	ANT	ANT
$\begin{array}{c} \text{Q} \\ \Delta \text{I} \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \text{BI} \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \text{FI} \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \Delta \text{I} \\ \hline \text{III} \end{array}$	$\begin{array}{c} \text{Q} \\ \epsilon \text{I} \\ \hline \text{III} \end{array}$
ANT	ANT	ANT	ANT	ANT

Cette émission doit être des années 315 et 316.

En effet l'atelier d'Antioche fut fermé après la mort de Maximin, dont on ne trouve plus l'effigie dans cette émission. Il le demeura pendant la période où Licinius et Constantin se trouvèrent en guerre en 314. S'il n'en avait pas été ainsi, Licinius aurait dû pendant cette guerre frapper des monnaies à sa seule effigie à Antioche. C'est ainsi que Constantin frappa pour lui seul des "Soli Invicto" à Rome. Mais au contraire l'atelier d'Antioche ne rouvrit que pour émettre des monnaies de Constantin en même temps que de Licinius, c'est à dire après la réconciliation entre les deux empereurs qui suivit la bataille de Mardic qui est de Novembre 314.¹⁴

On trouve—

Au revers.—IOVI CONSERVATORI AVGG. Avec Jupiter nu, debout à gauche, le manteau sur l'épaule gauche, tenant un globe surmonté d'une victoire et un sceptre; à ses pieds à gauche un aigle tenant une couronne en son bec.

¹⁴ In campo Mardienso (*Excerpta Valesiana*, v. 17, Teubn.) dans la Thracia; O. Seeck, *Anf.* (*Deutsch. Zeitsch. f. Geschich.*, vii. p. 264).

Au droit. 1.—IMP. C. FL. VAL. CONSTANTINVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 299; FR. 14.720, 14.721; 3 gr. 40; 18 m.m.

2. IMP. C. VAL. LICIN. LICINIVS P.F. AVG. Même tête. Cohen, No. 111; FR. 14.219 à 14.222; 3 gr. 70 à 3 gr. 15; 19 m.m. [Pl. XIII., No. 7.]

Les folles de cette émission réduits aux poids de 3 gr. 70 à 3 gr. 40 durent pouvoir s'échanger contre les deniers de 3 gr. 50, qui avaient alors cours dans les états de Constantin.

Crispus, Licinius jeune et Constantin jeune furent créés Césars le 1^{er} Mars 317; à partir de ce moment Licinius fit frapper à Antioche des monnaies aux noms de Constantin I et Licinius I Augustes; de Crispus, de Licinius II et Constantin II Césars. Ces monnaies forment deux séries, qui durent prendre fin avant la guerre, qui eut lieu entre Constantin et Licinius au milieu de 324.¹⁵ En effet cette guerre aurait sans doute arrêté la frappe des Constantins et Crispus, si toute émission n'eut été alors suspendue. Constance II, qui fut élu César le 8 Novembre 324, ne paraît pas encore dans ces séries qui présentent deux marques différentes comme exergues et lettres dans le champ.

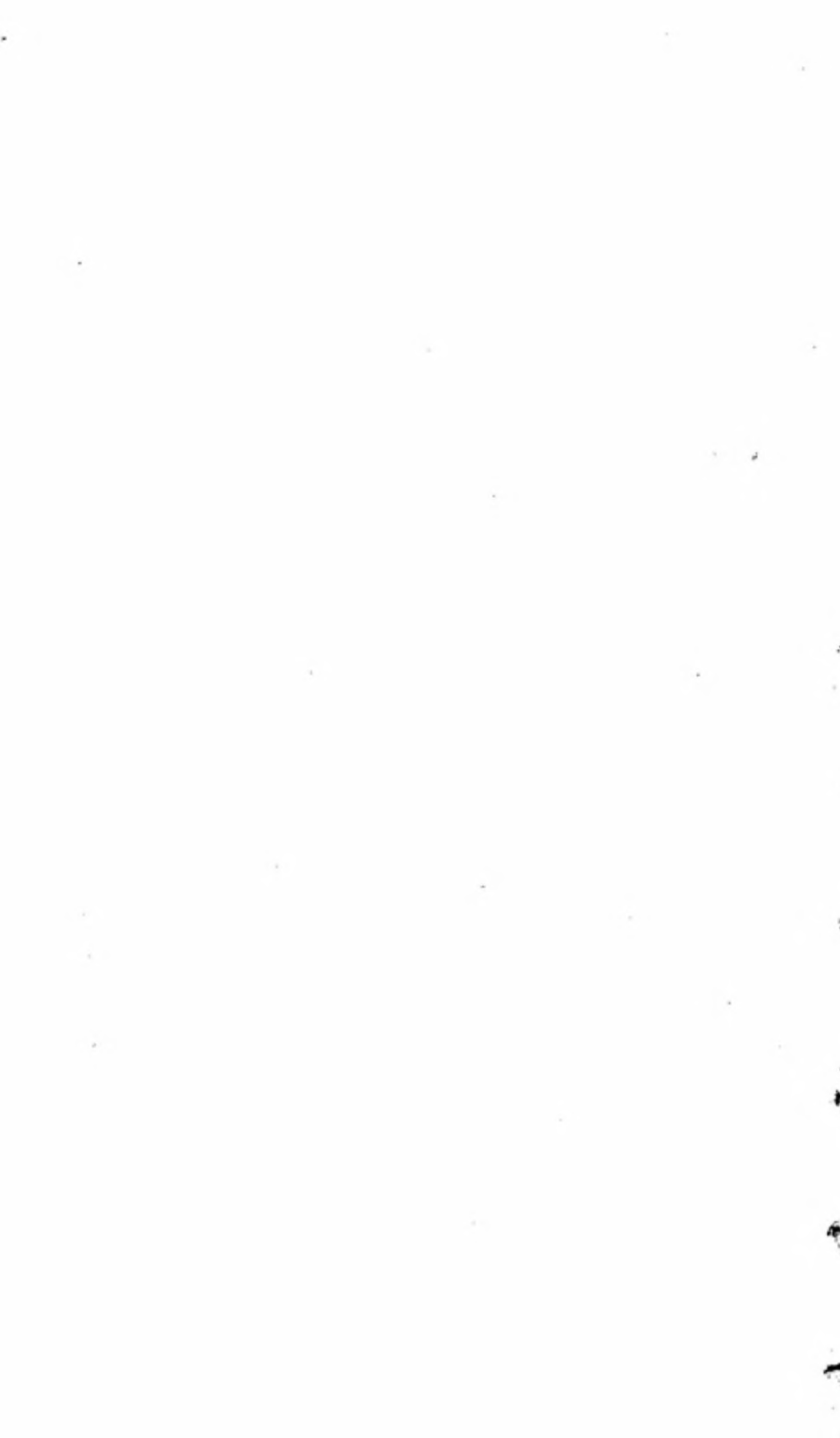
HUITIÈME ÉMISSION.

<u> </u> | A	<u> </u> | B	<u> </u> | F	<u> </u> | Δ	<u> </u> | ε
SMANT	SMANT	SMANT	SMANT	SMANT

¹⁵ Licinius est battu à Hadrianopolis le 3 Juillet 324; la guerre eut pour prétexte une invasion de Constantin, en guerre contre les Goths, sur le territoire de Licinius en 323. O. Seeck, *D. Anfänge Constantins d. Gr.*, loc. cit., p. 272.



MONNAIES D'ANTIOCHE.



$\frac{\quad | \quad Z}{\text{SMANT}}$	$\frac{\quad | \quad S}{\text{SMANT}}$	$\frac{\quad | \quad H}{\text{SMANT}}$	$\frac{\quad | \quad \Delta E}{\text{SMANT}}$
$\frac{\quad | \quad I}{\text{SMANT}}$	$\frac{\quad | \quad AI}{\text{SMANT}}$	$\frac{\quad | \quad BI}{\text{SMANT}}$	$\frac{\quad | \quad FI}{\text{SMANT}}$

Elle offre—

Au revers.—IOVI CONSERVATORI AVGG. Jupiter nu, debout à gauche, le manteau sur l'épaule gauche, tenant un globe surmonté d'une victoire et un sceptre; à ses pieds, à gauche, un barbare marchant courbé, les mains liées derrière le dos.

Au droit. 1.—IMP. CONSTANTINVS AVG. Son buste lauré à gauche avec le manteau impérial, tenant le foudre et un globe avec un sceptre. Cohen, No. 306, BR. M.; FR. 14·730, 14·731; 3 gr. 20; 19 m.m.

2. IMP. LICINIVS P.F. AVG. Même buste. Cohen, No. 118; BR. M.; FR. 14·223 à 14·228; 4 gr. 90 à 3 gr. 25; 19 à 18 m.m.

Au revers.—IOVI CONSERVATORI CAESS. Avec le même revers. La parfaite identité des revers des "Jovi Conservatori Augg. et Caess." prouve que ces pièces sont contemporaines.

Au droit. 1.—D. N. FL. IVL. CRISPVS NOB. CAES. Son buste lauré à gauche avec le manteau impérial, tenant le foudre, et de la main gauche un globe et un sceptre. Cohen, No. 81; BR. M.; FR. 15·447 à 15·449; 3 gr. 20; 20 m.m.

2. D. N. FL. CL. CONSTANTINVS NOB. C. Même buste. Cohen, No. 136; BR. M.; FR. 15·752; 3 gr. 20; 20 m.m.

3. D. N. VAL. LICIN. LICINIVS NOB. C. Même buste. Cohen, No. 32; BR. M.; FR. 14·400; 3 gr. 60; 19 à 20 m.m. [Pl. XIII., Nos. 8 and 9.]

On trouve encore—

Au revers.—SECVRITAS REIPVBLICAE. Avec la Sécurité voilée, debout à gauche, tenant un rameau baissé et soulevant sa robe.

Au droit.—FL. HELENA AVGVSTA. Son buste diadémé et drapé à droite, portant un collier de perles. Cohen, Nos. 12 et 13; FR. 13-887, 13-888; 3 gr. 40; 19 m.m.

Cette émission cessa d'être frappée en l'année 323 ou au plus tard dans la première moitié de 324. Il faut faire remonter à cette époque la frappe des monnaies de Helena Augusta, contrairement à l'opinion de Senckler,¹⁶ qui avait fixé ce début à l'année 325 d'après un passage de Théophanes.

Le poids de ces monnaies est souvent voisin de celui du denier = 3 gr. 50; toutefois il y a des pièces plus lourdes; le poids de 4 gr. 90 est exceptionnel, mais beaucoup de pièces de Licinius Auguste pèsent près de 4 grammes. Ce n'est que dans la série qui présente le signe X du denier avec le signe III que l'on trouve le poids moyen de 3 gr. 50.

$\frac{\begin{array}{c} | \text{X} \\ | \text{III} \end{array}}{\text{SMANT A}}$	$\frac{\begin{array}{c} | \text{X} \\ | \text{III} \end{array}}{\text{SMANT B}}$	$\frac{\begin{array}{c} | \text{X} \\ | \text{III} \end{array}}{\text{SMANT F}}$	$\frac{\begin{array}{c} | \text{X} \\ | \text{III} \end{array}}{\text{SMANT Δ}}$
$\frac{\begin{array}{c} | \text{X} \\ | \text{III} \end{array}}{\text{SMANT E}}$	$\frac{\begin{array}{c} | \text{X} \\ | \text{III} \end{array}}{\text{SMANT S}}$	$\frac{\begin{array}{c} | \text{X} \\ | \text{III} \end{array}}{\text{SMANT Z}}$	$\frac{\begin{array}{c} | \text{X} \\ | \text{III}^{17} \end{array}}{\text{SMANT H}}$

¹⁶ Senckler, *Bonner Jahrbuch*, tome xvii., p. 90. Théophanes (*Chronogr.*, tome i., p. 33, éd. Bonn) ne dit pas que ce fut la première frappe au nom de Helena Augusta; mais simplement qu'une distribution de monnaies fut faite au nom de l'impératrice en 325; cf. Hottner, *Westd. Zeitsch.* vi. 2, p. 148.

¹⁷ Je n'ai pas trouvé les chiffres plus élevés d'officines, mais

Cette série se continue jusqu'en 324, et le même exergue se représente sur les monnaies frappées après l'élection de Constance II César au 8 Nov. 324. Elle offre—

Au revers.—IOVI CONSERVATORI. Avec Jupiter nu, debout à gauche, tenant une victoire et un sceptre surmonté d'un aigle; à ses pieds à gauche un aigle tenant une couronne en son bec; à droite un captif assis les mains liées derrière le dos et retournant la tête.

Au droit. 1.—IMP. C. FL. VAL. CONSTANTINVS P.F. AVG. Avec son buste radié, drapé et cuirassé à droite. Cohen, No. 292; BR. M.; FR. 14·709 à 14·713; 3 gr. 28; 18 m.m.

2. IMP. C. VAL. LICIN. LICINIVS P.F. AVG. Avec le même buste. Cohen, No. 74; BR. M.; FR. 14·167 à 14·173; 3 gr. 55; 19 m.m.

3. D. N. VAL. LICIN. LICINIVS NOB. C. Avec son buste casqué et cuirassé à gauche, tenant un hasto et un bouclier. Cohen, No. 21; BR. M.; FR. 14·372 à 14·378; 3 gr. 60; 18 m.m.

On doit probablement ajouter à cette série les pièces suivantes qui présentent le même revers.

Au droit. 1.—D. N. FL. CL. CONSTANTINVS NOB. C. Cohen, No. 133.

2. D. N. FL. IVL. CRISPVS NOB. CAES. Cohen, No. 177.

En effet ces Césars sont contemporains de Licinius II.











L'émission qui va suivre présente le même exergue mais ne présente plus que Constantin I seul Auguste et

il doit y avoir au moins dix officines fonctionnant comme dans l'émission suivante. Le chiffre X est le signe du denier; cf. O. Seeck, *die Münzpolitik Diocletians und s. Nachfolger* (*Zeitschr. f. Num.*, xiii., p. 127).

Constance II César ; elle fut donc frappée après la victoire de Constantin et lorsque l'atelier d'Antioche se trouvait dans ses états.¹⁸ Elle ne contient plus de légendes païennes et les " Jovi Conservatori " qui viennent d'être décrits sont les dernières formules païennes qui se rencontrent sur les monnaies de l'atelier d'Antioche. A la même époque une nouvelle manière d'écrire le chiffre 9 en lettres grecques se remarque sur les monnaies.

Missong a fait remarquer que la lettre *θ* qui commence les mots *Θεός* et *Θάνατος* est écartée, probablement comme un signe néfaste de la numération païenne, mais qu'on la trouve sur les monnaies des temps chrétiens.¹⁹ L'on peut constater ce fait et trouver la confirmation de l'interprétation du savant numismate, sur les monnaies d'Antioche, où ce changement de numération indique le passage des formules païennes aux formules chrétiennes ou neutres.

NEUVIÈME ÉMISSION.

				
SMANT A	SMANT B	SMANT Γ	SMANT Δ	SMANT Ε
				
SMANT Σ	SMANT Ζ	SMANT Η	SMANT Θ	SMANT Ι

Cette émission, qui présente un exergue déjà paru dans la précédente, mais sans rien dans le champ, commence après l'élection de Constance II César au 8 Novembre 324 et dure jusqu'à la mort de Crispus et de Fausta en 326.

¹⁸ En effet Constance II fut élu César le 8 Novembre 324, après la défaite de Licinius, cf. *Idat. Fast.*

¹⁹ Missong, *Die Vorläufer d. Werthzahl 0 B auf römischen Goldmünzen*, dans la *Zeitsch. f. Numismat.*, vii., p. 283.

Elle offre—

Au revers.—PROVIDENTIAE AVGG. Avec une porte de camp ouverte au milieu sans battants, surmontée de deux tours; au dessus une étoile.

Au droit. 1.—CONSTANTINVS AVG. Avec sa tête diadémée à droite. Cohen, No. 454; BR.M.; F.R. 14-818 à 14-823; 3 gr. 28; 19 m.m.

2. Le même avec son buste diadémé et drapé à droite. Cohen, 455.

Au revers.—PROVIDENTIAE CAESS. Avec le même type.

Au droit. 1.—FL. IVL. CRISPVS NOB. CAES. Avec son buste lauré et cuirassé à droite. Cohen, No. 124; BR. M.; FR. 15-448.

2. CONSTANTINVS IVN. NOB. C. Avec son buste lauré, drapé et cuirassé à gauche. Cohen, No. 165; BR. M.; FR. 15-789 à 15-793; 3 gr. 45 à 3 gr. 30; 19 à 20 m.m.

3. FL. IVL. CONSTANTIVS NOB. C. Même buste. Cohen, No. 167; BR.M.; FR. 16-247 à 16-248; 3 gr. 50; 20 m.m. [Pl. XIII., No. 10.]

On trouve également—

Au revers.—SALVS REIPVBLICAE. Avec Fausta debout de face, regardant à gauche, tenant Constantin II et Constance II, enfants dans ses bras.

Au droit.—FL. MAX. FAVSTA AVG. Avec son buste drapé, en cheveux, à droite. Cohen, No. 6; FR. 15-317; 3 gr. 60; 20 m.m.

Au revers.—SPES REIPVBLICAE. Avec le même type.

Au droit.—FL. MAX. FAVSTA AVG. Avec son buste à droite coiffé en cheveux. Cohen, No. 15; BR. M.

Au revers.—SECVRITAS REIPVBLICAE. Avec la Sécurité voilée, debout à gauche, tenant un rameau baissé et soutenant sa robe.

Au droit.—FL. HELENA AVGVSTA. Avec son buste drapé à droite, avec un diadème et un collier formé de deux rangs de perles. Cohen, No. 12 et 13; BR. M.; FR. 13·890 à 13·894 et 13·908; 3 gr. 30; 20 m.m.

La même émission contient également une série de pièces qui ont les mêmes exergues mais qui présentent dans le champ une couronne, une étoile ou une étoile dans un croissant, et la légende.

On trouve—

Au revers.—Avec le sigle Ω
SMANTA; CONSTANTINVS
AVG, en trois lignes dans le champ; au
dessus une couronne, en dessous l'exergue.

Au droit.—Sans légende, tête laurée de Constantin I à droite. Cohen, No. 110; FR. 14·719 à 14·521; 2 gr. 15; 17 m.m.

Au revers.— \ast SMANTA à \ast SMANTI; CRISPVS CAESAR.
En deux lignes dans le champ.

Au droit.—Sans légende; buste diadémé et cuirassé de Crispus à gauche. Cohen, No. 60; FR. 15·434; 2 gr. 10; 19 m.m.

Au revers.—Avec les mêmes exergue et étoile. CONSTANTINVS CAESAR, en trois lignes dans le champ.

Au droit.—Sans légende; buste de Constantin II lauré, drapé et cuirassé à gauche. Cohen, No. 83; FR. 15·650 à 15·654; 2 gr. 50; 19 m.m.

De même *au revers* CONSTANTIVS CAESAR, en trois lignes dans le champ; une étoile au dessus.

Au droit.—Sans légende; buste de Constance II lauré, drapé et cuirassé à gauche. Cohen, No. 20; FR. 16·021 à 16·025; 2 gr. 30; 18 m.m.

Même *revers* avec FL. MAX. FAVSTA AVG., en trois lignes dans le champ.

Au droit.—Sans légende; buste de Fausta à droite.
Cohen, No. 1; FR. 15-348; 2 gr. 13; 18 m.m.

De même *au revers*, avec une étoile dans un croissant,
^{*}
 SMANTA; FL. HELENA AVGVSTA, en trois
 lignes dans le champ. Cohen, No. 2; FR.
 registre k. 3-312; 2 gr. 50; 18 m.m.

Toutes ces pièces de la dernière série sont d'un poids inférieur à celui des "Providentiae Augg. et Caess.," des "Salus et Spes Reipublicae"; elles ont dû être frappées les dernières, car le poids moyen de 2 gr. 50, qui est celui du denier Constantinien, mais abaissé, se retrouve dans l'émission des "Gloria Exercitus" qui commence après la fondation de Constantinople. C'est vers l'année 326 que l'on peut en conséquence placer cette réduction du poids du denier et il en est de même à Rome.

Il faut rapporter à l'émission présente deux pièces d'or du British Museum et du Hof Museum de Vienne qui présentent—

Au revers.—La légende ADVENTVS AVG. N. Avec Constantin en habit militaire à cheval à gauche, levant la droite et tenant une haste; comme
 exergue [|] SMANT (les pièces d'or n'ayant le plus souvent pas de lettres d'officines).

Au droit.—CONSTANTINVS P.F. AVG. Avec sa tête laurée à droite. Cohen, No. 11; BR. M.; Woodhouse, 66, 12, 14; H.M.V.; 4 gr. 71; 20 m.m.

Ces pièces sont très intéressantes parce qu'on peut les attribuer en raison de leur exergue, au 3^{ème} "Adventus Divi" ou entrée de Constantin à Rome, qui eut lieu le 21

Juillet 326,²⁰ à l'occasion des fêtes de ses Vicennalia qui tombent au 25 Juillet. L'atelier d'Antioche n'était donc pas encore fermé à cette époque ; et comme on y trouve jusqu'à la fin de l'émission présente des monnaies de Fausta et de Crispus, il faut supposer que ni ce dernier, ni à plus forte raison Fausta, n'étaient encore disparus au milieu de 326 ; mais rien n'empêche de placer, ainsi que le fait Zosime,²¹ la mort de Crispus au moment du séjour de Constantin à Rome. La mort de Fausta suivit de près.²²

O. Voetter indique l'année 326 comme celle de l'ouverture de l'atelier de Constantinople et de la fermeture de plusieurs autres ateliers (Sirmium, Londinium) qui en fut la conséquence.²³ Ce fut le cas de celui d'Antioche. La légende "Gloria Exercitus" qui y fut frappée lorsque Constantin le rouvrit est partout contemporaine des légendes "Urbs Roma" et "Constantinopolis." C'est donc postérieurement à 330 que l'on doit placer la reprise de la frappe à Antioche.

DIXIÈME ÉMISSION.

_____	_____
SMANT A	SMANT B

Elle offre—

Au revers.—GLORIA EXERCITVS. Avec deux soldats debout, casqués, tenant chacun une haste

²⁰ Cf. Mommsen ; C.I.L., 1, p. 397 ; 3^{me} adventus Divi du Calendrier de Philocalus.

²¹ Zosim. hist., 11, 29.

²² La plupart des auteurs sont d'accord sur ce point ; cf. Ermanno Ferrers, *Mogli et Figli di Costantino*, p. 6 ; *Acad. Reale d. Scienze di Torino*, 1898.

²³ Otto Voetter, *Erste christliche Zeichen auf römisch. Münzen*, dans la *Numis. Zeitsch.*, Wien, 1892, p. 55.

et appuyés sur un bouclier; entre eux, deux enseignes militaires surmontées de drapeaux.

Au droit.—CONSTANTINVS MAX. AVG. Avec son buste diadémé et drapé à droite. Cohen, No. 254; FR. 14·645; 2 gr. 45; 18 m.m.

Je n'ai pas vu les pièces semblables des Césars.

ONZIÈME ÉMISSION.

SMAN A	SMAN B	SMAN Γ	SMAN Δ	SMAN Ε
SMAN S	SMAN Z	SMAN H	SMAN Θ	SMAN Ι

Cette émission, qui contient Delmatius César et Constantin Auguste, dura de la date de l'élection du premier, qui eut lieu le 18 Septembre 335 à la mort du second, au mois du Mai 337. Elle comprend deux séries.

La première offre—

Au revers.—GLORIA EXERCITVS. Avec deux soldats casqués, debout, tenant chacun une haste et appuyés sur un bouclier; entre eux, deux enseignes militaires.

Au droit. 1.—CONSTANTINVS MAX. AVG. Avec son buste diadémé et drapé à droite. Cohen, No. 254; BR. M.; FR. 14·641 à 14·644; 2 gr. 70; 18 m.m. [Pl. XIII., No. 11.]

2. CONSTANTINVS IVN. NOB. C. Avec son buste lauré et cuirassé à droite. Cohen, No. 122; BR.M.; FR. 15·707 à 15·710; 2 gr. 70; 18 m.m.

3. FL. IVL. CONSTANTIVS NOB. C. Avec son buste lauré et cuirassé à droite. Cohen, No. 104; BR.M.; FR. 16·197 à 16·200; 2 gr. 90 à 3 gr. 15; 18 m.m.

4. FL. IVL. CONSTANS NOB. C. Avec son buste lauré, drapé et cuirassé, à droite. Cohen, No. 75; FR. 15-967; 2 gr. 40; 18 m.m. T. 9-184.
5. FL. DELMATIVS NOB. C. Son buste lauré et drapé à droite. 2 gr.

A cette série de monnaies de Constantin le Grand et de ses trois fils, alors seuls Césars, il faut ajouter les suivantes de Rome et de Constantinople qui ont le même poids moyen.

Au revers.—Sans légende. La louve tournée à gauche, allaitant Romulus et Rémus et les regardant.

Au droit.—VRBS ROMA. Le buste de Rome à gauche avec une aigrette sur le casque et le manteau impérial. Cohen, No. 17; FR. 15-263; 1 gr. 90; 18 m.m.

Au revers.—Sans légende. Victoire debout à gauche, posant le pied droit sur une proue de vaisseau, tenant un sceptre transversal et appuyée sur un bouclier.

Au droit.—CONSTANTINOPOLIS. Le buste de Constantinople à gauche, avec le casque lauré et le manteau impérial et tenant un sceptre. Cohen, No. 22; BR. M.; FR. 15-200; 2 gr. 35; 18 m.m. [Pl. XIII., No. 12.]²⁴

Cette première partie de l'émission se distingue par le poids de ses pièces, oscillant entre 2 gr. 50 et 3 gr., qui est le poids du denier réduit, de la série suivante de l'émission qui offrira nettement le poids du centenionalis.

Cette seconde série de pièces portant la légende "Gloria Exercitus" mais d'un type et d'un poids différents de ceux des précédentes, doit être la dernière émise; en effet les pièces de l'espèce du centenionalis qui n'ont pas d'ana-

²⁴ Par une erreur les revers de Nos. 12 et 13 ont été transposés sur la planche.

logues dans les émissions antérieures, continuent au contraire à être frappées après la mort de Constantin le Grand, survenue au mois de Mai 337.

On trouve—

Au revers. — GLORIA EXERCITVS. Avec deux soldats casqués, tenant chacun une haste et appuyés sur un bouclier; entre eux, une enseigne militaire surmontée d'un drapeau.

Au droit. 1.—CONSTANTINVS AVG. Son buste diadémé et drapé à droite. Cohen, No. 244; FR. 14·593; 1 gr. 60; 16 m.m.

2. CONSTANTINVS MAX. AVG. Son buste diadémé et drapé à droite. Cohen, No. 250; FR. 14·607 à 14·609; 1 gr. 55; 18 m.m.; BR. M. [Pl. XIII., 13.]

3. CONSTANTINVS IVN. NOB. C. Son buste lauré et cuirassé à droite. Cohen, No. 114; FR. 15·675 à 15·677; 1 gr. 70 à 1 gr. 10; 18 m.m.; BR.M.


4. FL. IVL. CONSTANTIVS NOB. C. Son buste lauré et cuirassé à droite. Cohen, No. 92; FR. 16·143; 1 gr. 75; 16 m.m.; BR. M.

5. FL. IVL. CONSTANS NOB. C. Son buste lauré et drapé à droite. Cohen, No. 50; FR. 15·922; 1 gr. 40; 15 m.m.

6. FL. DELMATIVS NOB. C. Son buste lauré et cuirassé à droite. Cohen, No. 10; FR. 15·558; 1 gr. 95; 15 m.m. T. 9·047.

Ces monnaies oscillant entre 1 gr. 10 et 1 gr. 95, sont des centenionales ou moitiés de deniers.

Une pièce d'or du British Museum présente l'exergue

 sans lettre d'officine, avec les VOT XXX au SMAN

revers et dut être frappée en 336, à l'occasion des Triennialia de Constantin le Grand.

Elle offre—

Au revers.—VICTORIA CONSTANTINI AVG. Avec la victoire marchant à gauche, tenant un trophée et une palme ; dans le champ à droite les VOT XXX.

Au droit.—CONSTANTINVS MAX. AVG. Avec son buste diadémé et drapé à droite. Cohen, No. 604 ; BR. M. ; Coll. Cracherode ; 4 gr. 85 ; 20 m.m.

JULES MAURICE.

X.

ON SOME FORGERIES OF THE COINS OF HENRY I AND HIS SUCCESSORS.

(See Plate XIV.)

IN the *Numismatic Chronicle* for 1897 will be found a paper on some coins of William I and II. There were there described sundry forgeries of coins of these monarchs as well as one of Harold II. This paper is in a way a continuation of the one published two years ago, and perhaps I may, therefore, be excused if I refer briefly to the earlier arguments. The coins, some twelve in number, were shown to be connected with each other by having been struck in part or entirely from the same dies. Evidence was given of the falseness of No. 1, the coin of Harold, both on account of the moneyer's name and the whole condition of the piece. The second coin was also shown to be false on account of its having a reverse identical with the first. No. 3 had the same obverse as No. 2, and was therefore false, and so on. The latest coins of that series, which also purported to be the latest coins of William II, Hawkins' type 250, had no connexion whatever with the first coin of Harold II except identity of reverse legend on one piece. The three coins of this type described were, however, struck from the same obverse die, which settled the matter as regards their spurious

origin. Now these three coins of type Hawkins 250, and one or two that I have since met with, absolute duplicates of these, were all struck on other coins. Where the design of the underlying coin has been at all visible I have been able to recognise a common Paxs penny.

The grounds, therefore, for having thought this series false were: 1st. False moneyers' names. 2nd. The use of identical dies or parts of them. 3rd. The use of contemporary coins as flans.

At the end of the paper on the coins of William I and II, reference was made to another series of forgeries, viz., of Henry I and Matilda. Since that time I have been unusually fortunate in getting together a number of these concoctions, and it is on them that I purpose to make some remarks.

Since the issue of the last paper I have heard it stated on the authority of that article that the several types of the William coins there described are all false. This is certainly true so far as concerns the individual coins, but it goes no further than to include these coins and coins struck in part or in whole from those dies. Thus the side-faced Paxs coin there figured is a false one. Genuine examples of the side-faced Paxs (Hawkins 240) type certainly exist; so with the last type of William II those described are false. I should be sorry, however, to believe that all the examples of this not very uncommon type were fabrications.

These remarks apply also to the coins to be described. It must be clearly understood that there are genuine coins of all the persons here referred to, though of some of the types here described genuine coins were never issued. Though the three Matildas [Pl. XIV. 1, 2, 3,] to be described first are undoubtedly false, genuine ones exist,

though not of these types [Pl. XIV. c]. Again, the Henry I mule [Pl. XIV. 4] is false, a genuine coin of this type not being known; but this certainly does not imply that all the coins of the type of Hawkins 255 are false or all the coins of type 265.

I shall describe each coin briefly, but it must be understood that the first coin I describe is not of necessity the first coin that was struck from the dies. I have had to arrange the series so as to begin with an undoubtedly false coin.

1. *Obv.*—Crowned female head three-quarters to right, sceptre in front, no inner circle. Legend, MAVTILDE REGINA AN. This device is evidently suggested by the coin of Henry I; Hawkins 266.

Rev.—Short cross with rough lis terminations; pellet in each angle, all within dotted inner circle. No distinct legend, but some uncouth ornaments and letters.

This is the reverse of a series of coins all considered Scottish and attributed to a Malcolm or David I. They are never legible. This piece is struck on a penny of Henry II of his first issue, that known as the Tealby type, Hawkins 285. The reverse cross and crosslets are clearly to be seen on the obverse of this coin [Pl. XIV., No. 1].

2. *Obv.*—Same die as last.

Rev.—Cross potent, in each angle a small cross, all within an inner circle. Legend, illegible.

This is the ordinary Tealby type reverse. The coin is overstruck on some other coin [Pl. XIV., No. 2].

3. *Obv.*—Same die as Nos. 1 and 2.

Rev.—Tressure of four sides fleury at the corners, upon cross fleury; a pellet in each angle. Legend, + OSWEF : ON · NORȝA.

This is the common reverse of the commonest type of Henry I's coinage, Hawkins 255. There is no definite evidence of this piece having been overstruck. [Pl. XIV., No. 3.]

These three pieces were all in one lot and passed as false at the sale of Mr. Webb's coins. That they are false there can be no doubt, as the work of the obverse is very bad indeed and bears no resemblance to the work of the genuine coins of Matilda.

4. *Obv.*—Bust to left crowned, sceptre in front. Legend, +hENRIEVS R: type of Hawkins 265, of Henry I's time.

Rev.—From the same die as No. 3. From the same source. [Pl. XIV., No. 4.]

5. *Obv.*—Same die as last.

Rev.—Four-sided tressure, fleury at the angles, enclosing star; trefoil of annulets opposite each side. Legend, +OSWEF : ON . PE GL (Wallingford). Type as Hawkins 265 both sides, from same source. +OSWEF : ON ; from same die as No 3. [Pl. XIV., No. 5.]

6. *Obv.*—Three-quarter face to left holding sceptre. Legend, +hENRIEVS R. The letters are from the same die as No. 4.

Rev.—Same die as No. 3. From the Montagu collection. [Pl. XIV., No. 6.]

7. *Obv.* and *Rev.* from same dies as No. 5, but reverse legend same as No. 3. In the collection of Sir John Evans.

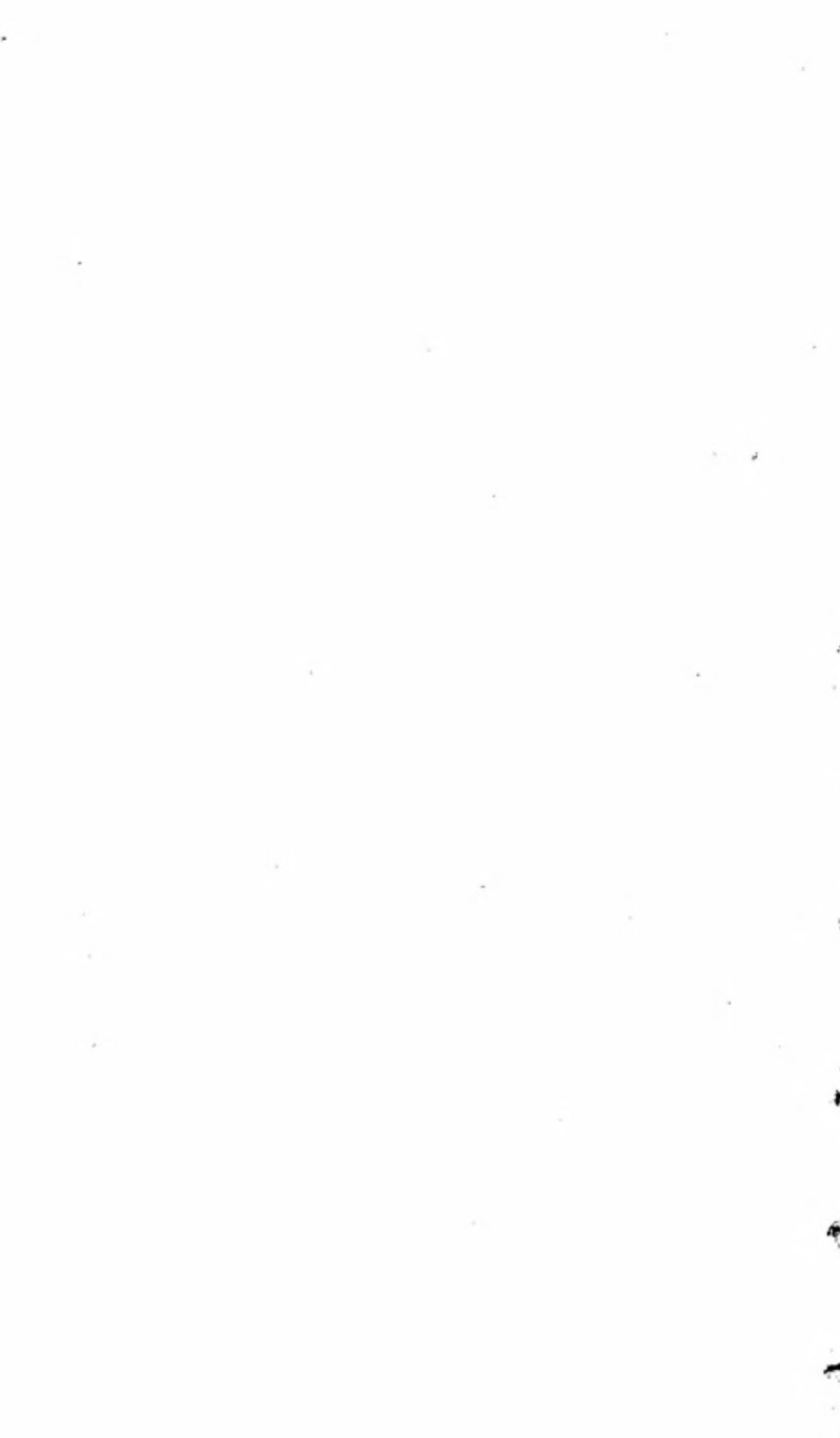
8. *Obv.*—Rude crowned bust to right; in front, horseman's mace. Legend, STIEFN.

Rev.—Cross moline, pierced at ends, terminations meet and form a tressure fleured internally. Legend, +OSWEF : ON . LVNDE. As before from same die as No. 3. Struck over another coin. [Pl. XIV. No. 7.]

A few duplicates of these coins are known to me. Mr.



COINS OF STEPHEN &c.
AND THEIR IMITATIONS.



Montagu had a Matilda like No. 1, though it was not included in his catalogue; in which, however, No. 5 appeared and was sold for £11, Part II., Lot 300. He also had a coin of type No. 8. I know of at least two other specimens of No. 6; one was sold quite lately. That all these coins are fabrications there can be no doubt; though, as with the William pieces, one coin by itself, except these of Matilda, tells very little of its false story. The same features are to be observed on this series as on the earlier one.

1st. They are descended from a concoction.

2nd. They are partly or wholly from the same dies.

3rd. They are overstruck.

4th. As with the William forgeries, so here, there is a type of which the original is unknown.

It will be noticed that the only legible moneyer's name on this series is or purports to be OSWEF. The letters are not very clear; the first one is a badly formed O and looks almost like a D. The next letter is S and the one following it a blurred V or W; the last two letters are quite clearly EF. The fact of the E being clearly E does away with any idea of the letter before it having a vowel sound, so that it cannot be supposed that the name was OSVLF. OSWEF or OSVEF I have not been able to find in any moneyers' list, whereas OSVLF is a fairly well-known name and appears on Henry I coins struck at Wallingford of the type Hawkins 265. The importance of this alteration in the name will at once be apparent when reference to the William series of forgeries is once more made. There the invention LEOFVILD takes the place of the original LEOFPARD. The fabricator has again fallen foul of a V.

I must now leave this interesting series for another, not

less interesting, but in which the connexion with each other has not been so clearly brought forward and in which the suspicion of forgery has not till quite lately existed.

There have been known to English numismatists for a long time past, coins of Robert, Eustace, Stephen and Matilda, Stephen alone, and Henry, Bishop of Winchester, which only differed from the well-known and finely worked coins of these potentates in that the work was a little coarser and the coins not quite up to the style of undoubted originals. The fine pieces have been stated to be of English work; the coarser ones of Boulogne work. The explanation of this term for the coarse work is to me an enigma. Had it referred to Eustace and Stephen as Counts of Boulogne, it ought not to have been applied to the Robert coin; nor do I see why Boulogne should have been credited with such poor manufacture as these pieces present. This is, however, by the way. To return to these duplicate types of rare coins of exalted personages, all those of fine work have a certain resemblance in style to each other. In the same way those of coarse work present a surprising likeness each to the other.

The list which follows is probably an incomplete one, and may be added to at some future time.

1. Imitation of the coin attributed to Robert of Gloucester.
Hawkins 280. [*Comp. Pl. XIV., a.*]

Obv.—Mailed figure on horseback. Legend, ROBERT GISTD.

Rev.—Cross pattée over cross fleury; ornaments take the place of legend. [*Pl. XIV., No. 8.*]

I know of two examples of this piece. The one here described, which previously belonged to Mr. Brice and then to Mr. Montagu, and the one sold in the Montagu

Sale, Cat. Part II. I have had recently an opportunity of viewing this latter example. It is most beautifully struck over a short-cross penny. The old reverse under the new obverse is most plainly visible. The two examples are from the same dies.

2. Imitation of Stephen as figured in Hawkins 278. [*Comp.* Pl. XIV., d.]

Obv.—Profile to right, sceptre in front, the sceptre is topped by a lozenge. Legend where visible, STIEN.

Rev.—Cross pattée upon cross fleury; D. G. and ornaments in place of legend. Struck on another coin. [Pl. XIV., No. 9.]

3. Imitation of Eustace Fitz John, Hawkins 282. [*Comp.* Pl. XIV., e.] Lion type.

Obv.—Lion passant to right, underneath two double shackle-bolts, two annulets above, two crosses in front. Legend, +EISTAOHVS.

Rev.—Escarbuncle, fleury; ornaments in place of legend. [Pl. XIV., No. 10.]

4. Imitation of Eustace Fitz John. Warrior type, *Obv.* as Hawkins 283.

Obv.—Half-length mailed figure to right, holding large sword. Legend, EVSTACIVS.

Rev.—An escarbuncle of four plain limbs, terminating in an annulet and four engrailed limbs terminating in a lis. Ornaments in place of legend. Struck on another coin. [Pl. XIV., No. 11.]

5. Imitation of the two-figure coin attributed to Stephen and Matilda, Hawkins 281.

Obv.—Two full-length figures, holding standard between them. Legend, +ETIEFNER.

Rev.—From same die as last piece. Struck on a coin [Pl. XIV., No. 12.]

6. Imitation of Henry, Bishop of Winchester, Hawkins 279.
[Comp. Pl. XIV., b.]

Obv.—Crowned bust to right holding crozier. Legend,
+HENRICVS EPC.

Rev.—Cross pattée ornamented with pellets, in angles lis-headed sceptres. Legend, STAPHANVS . REX. Struck over a short-cross penny. The cross and little crosses are quite visible on the obverse of the piece, as well as the letters AD of the moneyer's name, probably for ADAM, a London moneyer of very common occurrence. [Pl. XIV., No. 13.]

These are all the varieties I can at present describe. The evidence of falseness is fairly well marked upon them. In the whole series where ornaments exist which contain annulets in the originals, these pieces all show pellets, *i.e.*, raised dots in place of sunk ones. Again, in nearly all of them if not in every one, a coin has been used as a blank on which to strike. One coin of Robert is struck on a short-cross penny, the others on coins which, so far, I have been unable to identify. Mr. Andrew very clearly accounts for the first feature, *viz.*, the raised dots in place of sunken ones, by suggesting that all these pieces have been copied from engravings of coins rather than from the coins themselves. If, for instance, the engravings of originals in Hawkins be compared with these "Boulogne" work pieces, the resemblance cannot fail to strike the observer. It is quite impossible to judge from Hawkins' pictures whether the dots are raised or the reverse. Slight errors, too, of the engraver in copying the genuine coins are faithfully reproduced upon the forgeries.

The coin of the Bishop of Winchester shows this in the clearest way. The original is now in the British Museum, broken as stated by Hawkins, and as

indicated in his plates. The picture, however, is not taken from the coin, but probably from Ruding's plate of the same coin. When the first edition of Hawkins' book was published in 1841, the coin itself was still in the lost Pembroke collection and was thus unavailable for illustration, so that an engraving was pressed into service for the production of Hawkins' plate, which has never been altered since it was first engraved. It is satisfactory to know that the forger has copied this plate and has produced a coin nothing like the original, but marvelously like the picture of it, as it shows how very false the piece is, to say nothing of its having been struck on a penny probably of King John's time.

As in the two previous series the fabricator has used his dies wholly or in part to produce two different coins. He has overstruck them and he has produced a new variety, No. 4 [Pl. XIV., No. 11].

It seems to me reasonable to believe that where any series may be found in future to show all these methods together in the use of dies, there forgery should be at least suspected. Overstriking by itself was unusual, but there are plenty of examples of the genuine use of coins as flans; so also with the dies themselves, examples of original coins can be shown in which identical dies have been used in whole or in part; but the combination of these processes is always suggestive of forgery, and where the result is a coin of extreme rarity the suspicion becomes almost a certainty.

It has been objected to by some people that the importance lent to forgeries by their being described and figured and written upon might lead to a fresh crop of these inventions, and thus do an injury to coin-collecting and the objects we all have in view. Others, among

whom I may class myself, see in this process just the opposite tendency, and think that the more clearly a forgery is shown up the less likely is it that a trade will be done in such wares. It certainly seems to me probable that if a maker of false coins knows that his wares can be detected with but little difficulty, he will cease from such an unprofitable business, and, let us hope, turn his energies to something more respectable.

One word of explanation of the accompanying plate may be of use. The pictures with numbers attached are all from false coins. The lower lettered row, however, are examples of the rare originals, and are placed here for purposes of comparison, both of style and type. Such a comparison cannot fail to render service in the cause of truth.

L. A. LAWRENCE.

MISCELLANEA.

BIBLIOGRAPHICAL NOTES ON GREEK NUMISMATICS.

(Continued from Vol. XVIII., p. 333.)

KINGS AND PEOPLES.

Spain.

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POSEIDONIA and CAULONIA.—Resemblance of Poseidon and Apollo in attitude to Zeus at Aegium. C. A. Hutton, *Brit. Sch. Ann.*, iii., 151.

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CAMARINA.—Aphrodite and swan. A. de Ridder, *B. C. H.*, 1898, p. 220.

MESSENE-ZANCLE.—Zeus-type of tetradr. probably not con-

nected with Hagelāidas. Tetradr. with **DANKVAION** fixing original of statuette before 476 B.C. (but see *Num. Chr.*, 1896, 109 f.). C. A. Hntton, *B. S. A.*, iii., 150—152.

SYRACUSE.—Female heads on coins of Euainetos and Kimon at S., and similar (esp. facing) types elsewhere, compared with terra-cotta mask on Eretrian oenochoe. R. von Schneider, *Oesterr. Jahreshfte*, i., 146 f.

TYNDARIS.—Dioscuri. P. Perdrizet, *B. S. A.*, iii. 162.

Thrace, &c.

Thracian Types.—B. Pick, *Jahrb. d. Inst.*, 1898, 184—174 (Pl. 10). I. *Orpheus* (Philippopolis, Trajanopolis), p. 185. II. *Orpheus, Eurydike, Hermes and 8 rivers of underworld* (Hadrianopolis), p. 188. III. *Herakles; 12 labours, &c.* (Hadrianopolis: cf. zodiacal coin of Perinthus, Nicopolis ad Istrum), p. 140. IV. *Theoxenia*: reclining god, accompanied by goddess (Bizye; wrong attributions to Thyatira and Pergamon); deity reclining alone (Odessos); Dioskuri (Tomis, Thasos), p. 145. V. *The Great God of Odessos and the Thracian Horseman* (Odessos: festival **ΔΑΡΖΑΛΕΙΑ**; coins with Demeter and Kore, and with head of a goddess, probably partner of the Great God, Dionysopolis, Tomis, Istros, Kings of Odrysae and Scythians), p. 155. VI. *Colossal Apollo of Kalamis* (Apollonia: \mathcal{R} and \mathcal{A} anchor-coins, and \mathcal{A} with **ΑΠΟΛΛΩΝΟΣ ΙΑΤΡΟΥ**). *Other Apolline types* (Sestos, Olbia), p. 166. VII. *Hermes of Praxiteles* (Anchialos), p. 178.

NICOPOLIS AD ISTRUM.—Counts as Thracian not Lower-Moesian city, and puts on coins name of Thracian governor, to time of Commodus: thereafter *ὑπατεύοντος* points to consular legates of Lower-Moesia. *ἵπ.* on Thracian coins (e.g. Perinthus, B. M. Cat., 23), to be explained by a *legatio* filled by a *consul designatus*. A. v. Premerstein, *Oesterr. Jahresh.*, *Beibl.* i., 185, 189, 190.

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PHILIPPI.—Title *Victrix* does not occur on coins, which do not support restoration of C. I. L. iii.¹ 660 as Col[oniae Augustae Iul]iae Viet[ricis Philip]pensium (*Miss. de Macéd.*, No. 4). P. Perdrizet, *B. C. H.*, 1898, 536.

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Illyria.

J. Brunšmid, *Die Inschriften u. Münzen der griech. Städte Dalmatiens. Abhandl. des arch.-epig. Seminar der Univ. Wien*, xiii., 1898.

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CRANNON.—Horse and trident of Poseidon Hippios. A. de Ridder, *B. C. H.*, 1898, 231.

Locri Opuntii.

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Boeotia.

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Attica.

ATHENS.—Magistrates on tetradr. of new style. Πολυ(κλῆς) and Τιμαρχιδ(ης) on series xvi. (Beulé, xviii.) belong to the well-known artist-family. Kirchner, *Arch. Anz.*, 1898, p. 185. Andreas (in series Ἀνδρίας—Χαριναύτης, also third in series Νικογένης—Καλλίμαχος) = archon c. 140 B.C. Of Apolexis and Lysandros, moneyers early in first century, the former is mentioned as ephebos c. 103

B.C. (C. I. A., ii., 465, 96), and was archon, C. I. A., ii., 479, 487. Architimos archon c. 40 B.C. Kirchner, *Rhein. Mus.*, 53 (1898), 389 f. Significance of symbol of Dioscuri on tetr. of Mikion and Eurykleides. P. Perdrizet, *B. S. A.*, iii., 164. Asklepios-symbol on tetr. of Menedemos and Epigenes. E. Reisch, *Festschr. f. O. Benndorf*, p. 140.

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PHÆSTUS.—Herakles and Hydra. B. *Pick, Jahrb. d. Inst.*, 1898, 143.

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Pontus.

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LAODICEA.—Female figure between wolf (ΛΥΚΟΣ) and boar (ΚΑΠΡΟΣ); Rhea nursing Zeus, with Curetes and four river-gods. G. Weber, *Ath. Mitth.*, 1898, pp. 184, 190, &c. Cf. Ramsay, *Berl. Phil. Woch.*, 1897, p. 68.

MYSI ΑΒΒΑΪΤΑΙ, ΕΠΙΟΤΕΤΕΙΣ, GRIMENOTHYRAE, TEMENOTHYRAE.—Coins of Abbaïtae struck at Ancyra, Synaus, or Cadoi; of Epicteteis at Aezanis; of Grimenothyritae at Trajanopolis and Grimenothyrae (different places); of Tomenothyritae at Tomenothyrae Flaviopolis. F. Imhoof-Blumer, *Festschr. f. O. Benndorf*, pp. 201 f.

Lycia.

Name + ΨΠΡΟΜΑ (B. M. Catal., No. 118) compared with Carian place-name Κάπριμα. U. Köhler, *Oesterr. Jahresh.*, i., p. 214.

ACALISSUS.—Helen between Dioscuri. P. Perdrizet, *B. S. A.*, iii., 169.

Pisidia.

Lacedaemonian connections of various towns shown by coin-inscr. and types, especially Helen and Dioscuri (Selgo, Sagalassus, Amblada, Termossus Major, Codrula). P. Perdrizet, *B. S. A.*, iii., 163.

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Cilicia.

Coin-types of some Cilician cities : Aegeae (Ecclesia personified), Anazarbus, Augusta, Lamos, Mallus (hieron of Amphilochos), Selinus-Trajanopolis, Soli-Pompeiopolis (goddess on bull, Dionysos with bull's horns, portraits of Pompeius, Chrysippos, Aratos), Tarsus ("Monument of Sardanapalus," Apollo Lykeios, Perseus, Kronos, Amphilochos, &c.). F. Imhoof-Blumer, *J. H. S.*, 1898, pp. 161 ff., Pl. XII., XIII.

Various Æ Cilician coins : Anemurium, Valerian ("Artemis Alphaea"); Anazarbus, Elagabalus (ΔΗΜΙΟΥΡΓΙΑ ΑΝΤΩΝΕΙΝΟΥ κ.τ.λ.); Olba, Augustus and Ajax; Seleucia ad Calycadnum (Dionysus drawn by panthers, Athena and giant); Tarsus, Caracalla (wolf and twins, Nike), Gordian (Artemis drawn by bulls), Domna (ΔΟΜΑ, Tyche with river at her feet); Elaeusa (Head of Zeus, Nike). Riggauer, *Münch. Sitzgsber.*, 1897, ii., 527 f.

ÆGEAE.—Zodiac. Pick, *Jahrb. d. Inst.*, 1898, p. 142, note 15.

MALLUS.—Note (from *Athen.*, Jan. 30, 1897) of coin ΜΑΛ. ΙΕΡ. ΤΟΥ ΘΕΟΥ ΑΜΦΙΛΟΧΟΥ, date ΑΠC (described as B.C. 281!!). *Amer. Journ. Arch.*, 1897, p. 346. See *J. H. S.*, 1898, pp. 163, 164.

TARSUS.—Ἐν Κοδρείγαις ὁροῖς Καλίκων. Site of Kotriga suggested at Bairamli. W. M. Ramsay, *B. C. H.*, 1898, p. 238.

Galatia.

ANCYRA.—Æ Domna, rev. Tyche. Riggauer, *Münch. Sitzgsber.*, 1897, ii., p. 527.

Cappadocia.

ARIARATHES X., autonom. and Imperial of CAESAREA. Riggauer, *Münch. Sitzgsber.*, 1897, ii., pp. 523 f.

Cyprus.

STASIOIKOS.—Goddess on bull. Imhoof-Blumer, *J. H. S.*, 1898, p. 165.

Syria.

ANTIOCHUS II. and ANTIOCHUS HIERAX.—Heads winged. R. Förster, *Jahrb. d. Inst.*, 1898, 179.

ANTIOCHUS IX.—"Monument of Sardanapalos." Imhoof-Blumer, *J. H. S.*, 1898, 169.

HIEROPOLIS.—Significance of eagle-type. F. Cumont, *Festschr. f. O. Benndorf*, p. 298, note 4.

Phoenicia.

SIDON.—Zodiac. Pick, *Jahrb. d. Inst.*, 1898, p. 142, note 15.

TRIPOLIS.—Eras of Tripolis. Summary by Clermont-Ganneau in *Comptes R. de l'Acad.*, 1897, p. 429, of article by S. Rouvier (see *Journ. Asiat.*, 1898; *Rev. Num.*, 1898, p. 710).

Arabia.

MEDABA.—2 Æ of M., hitherto not known from coins.

(1) Elagabalus, $\text{MH}\Delta\text{AB}\Omega\text{N TYXH}$, Tyche-Astarte with cornucopiae and bust of Osiris. (2) Same obv. die [$\text{MH}\Delta\text{A}$]BHN. TYX., similar type = de Saulcy, *Terre-Sainte*, p. 858, under Rabbath-Moba. E. Babelon, *Comptes R. de l'Acad.*, 1898, pp. 388 ff.

Characene.

Numismatique et chronologie des dynastes. E. Babelon, *Comptes R. de l'Acad.*, 1898, p. 530. (See *Journ. Internat.*, 1898, p. 381 f.).

Egypt.

PTOLEMIES.—Treatment of beard and hair of Zeus or Zeus-Ammon on Ptolemaic, and of Jupiter, Neptune, and Romulus on Roman coins, compared with that of bronze head (Romulus-Quirinus?) from Rome. Furtwängler, *Münch. Sitzgsber.*, 1897, ii., 142, 143.

ALEXANDRIA.—Orpheus, Zodiac, Herakles and Hydra, Herakles and Stag, Tyche reclining. Pick, *Jahrb. d. Inst.*, 1898, 185, 142 note 15, 143, 144, 154. Elpis as city-goddess. Imhoof-Blumer, *J. H. S.*, 1898, p. 162.

Cyrenaica.

CYRENE.—Arguments against Svoronos' identification of ΠO with Πολύζαλος Ἀγέλαστος, and his theory of dedication of Delphian charioteer. Homolle, *B. C. H.*, xxi. (1898), p. 582.

Zeugitana.

HIPPO DIARRHYTUS.—Une monn. inéd. H. Renault, *Bull. archéol. du Com. des Travaux hist. et scien.*, 1897, pp. 250-259.

COSSURA.—A. Mayr, *Röm. Mith.*, 1898, pp. 367 ff., especially p. 397.

Uncertain.—Æ. Beardless male head r., FELIX PRINCEPS.

Rev. VE PET COLONIA IVLIA IIVIR. Athena holding Nike. Another at Berlin, similar legends, rev. yoke of oxen. Possibly Syrian or Phoenician. Rig-gauer, *Münch. Sitzsber.*, 1897, ii., p. 530 f.

METROLOGY AND ECONOMY.

Gortyna decree, ordering "Make use of the bronze money (*νομίσματι τῷ καννχῶ*) which the state has put in circulation, and do not accept silver obols (*τὸ δὲ δ' ὀδελὸν μὴ δέκεσθαι τὸν ἀργυρίον*)." Accepting silver obols, refusing bronze money, or receiving or requiring grain in payment, punishable by a fine of five silver staters. Assigned to early in fourth century, and supposed to refer to earliest bronze coinage. F. Halbherr, *Amer. Journ. Arch.*, 1897, p. 198. But probably of later date. Svoronos, *Journ. Intern.*, 1898, p. 178 f.

Inscription relating to steps taken by Athenians to introduce uniformity of weights, measures, and coinage in allied cities. Text published by Baumeister, *Monatsber. d. Berl. Akad.*, 1855, p. 197, now lost; a second copy found on Siphnos. A. Wilhelm, *Oesterr. Jahresh. Beibl.*, i., p. 48.

F. Hultsch, *Die Gewichte des Alterthums nach ihrem Zusammenhang dargestellt. Abhandl. der kön. sächs. Ges. d. Wiss.* (Leipzig), xviii., No. ii., 1898.

Sur un poids de plomb à légendes grecques provenant de Syrie. Clermont-Ganneau, *Comptes R. de l'Acad.*, 1898, p. 606.

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Revue des Études grecques. Numismatique, Métrologie, Calendrier, 1897, p. 251; 1898, p. 514.

Amer. Journ. of Arch., 1897, pp. 555, 556; 1898, pp. 438, 434.

COLLECTIONS.

BOSTON MUSEUM OF FINE ARTS.—Additions in 1897: 63 Greek, 18 Roman. *Amer. Journ. Arch.*, 1898, pp. 148 f.

FINDS.

MYCENAE.—'Αρχαία Ἑλληνικὰ νομίσμ. εὑρεθ. ἐν Μυκῆναις. M. Lambropoulos. Summary by Homolle, *Comptes R. de l'Acad.*, 1897, p. 49.

PITIGLIANO (Etruria).—N stater of Philip II of Macedon (symbol, trident). G. F. Gamurrini, *Not. d. Scavi*, 1898, p. 140.

CASTELFRANCO (Emilia).—Lumps of bronze, many marked with the "dry branch" (cf. Garrucci, Pl. VII. and IX.). E. Brizio, *Not. d. Scavi*, 1898, pp. 226 f.

TIRIOLO (Bruttium).—Bruttian and other coins found April, 1897. 85 Bruttian drachms (head of Amphitrite, rev. Poseidon); 239 with bust of Nike, rev. Pan standing; 19 triobols; 14 Carthaginian drachms (head of Persephone, rev. horse; 1 made up of two obverses), 1 triobol. Total, 358 coins. In addition, 856 coins not examined, mostly Carthaginian drachms, as above. E. Gabrici, *Not. d. Scavi*, 1898, p. 174 f.

PALAZZOLO-ACREIDE (prov. Siracusa).—460 Æ Sicilian and Italian, mostly of Pegasus type. A. Salinas, *Not. d. Scavi*, 1897, p. 486.

TOR DI CONTE, Fusco (near Syracuse). 6 Æ Syracuse (b.c. 345—317) found in tomb under hand of a corpse, buried towards end of fourth century. P. Orsi, *Not. d. Scavi*, 1897, p. 477. Cf. pp. 486 (Æ Syracuse), 487 (Mamertini), 488 (various), 489 (Mamertini), 500 (7 Æ Syracuse).

MISCELLANEOUS.

Παράσημα of cities on honorific inscriptions. Supplement to article in *B. C. H.*, 1896, pp. 549 f. Pellene (two dolphins; type does not occur on coins), Istrus (eagle on dolphin), Athens? (owl flying). P. Perdrizet, *B. C. H.*, xxi. (1898), pp. 577—579. See above, Cos.

La Casa dei Vettii. Picture supposed to represent process of coinage (*Num. Chron.*, 1896, Pl. VI.) described as "Amorini metallurgi"; the central figure explained as a customer. A. Sogliano, *Mon. Ant.*, 1898, p. 355, fig. 51. Cf. Blanchet, *Rev. Num.*, 1899, p. xvi f.

Bericht über das griech. Münzwerk. Mommsen, *Sitzgsber. d. preuss. Akad.*, 1898, No. v., p. 79.

G. F. HILL.

ANCIENT BRITISH COIN OF VERULAM FOUND AT OSTEND, BELGIUM.—The copper coin of Verulam, a description of which is given below, was found, not in Britain, but on the other side of the Channel at Ostend. The type is very rare, but not unpublished, as I have figured and described a specimen in the Supplement to my *Coins of the Ancient Britons*, Pl. XXI. 7, p. 546. This, which is in the British Museum, weighs 40½ grains, but I am not sure as to the weight of the coin now under consideration. The original is in the Royal Cabinet of Medals at Brussels, and caught my eye during a recent visit. It may be thus described:—

Obv.—Convex, VERL in front of a bearded head to the right.

Rev.—Concave, VIIR above an exergual line, and below a hippocampus to the left; in front a star of pellets; above, a ring-ornament between two trefoils.

The ring-ornament differs from that in my figure and description of the Museum specimen, in the ring being plain and not beaded. On examination of the Museum coin, I find that on it also the ring is plain, and that pitting from oxidation gave it the appearance of being beaded, on which my engraver has improved.

It is remarkable that the name of the town of Verulam should occur on both the obverse and reverse of the coin, while the name of the King under whose authority it was struck—Tasciovanus—is absent. It is also singular that though we have VERL on the obverse, we should have VIIR on the reverse. The substitution of II for E on both Roman and ancient British coins is well known, but here we have the two forms on the same coin. The type of the reverse occurs on another coin (*Anc. Brit. Coins*, Pl. VII. 11) with TAS below the hippocampus.

The circumstances of the finding of this coin are almost as

remarkable as the coin itself. It was accidentally picked up on the seashore at Ostend by M. Bernard, formerly President of the Chamber of Representatives in Belgium, and still a Minister of State, and by him presented to the Royal Cabinet.

I have recorded other instances of ancient British coins being found on the Continent at Amiens, Arras, Boulogne, Rouen, and Rome. Such a dissemination of our native coinage seems to testify to a constant intercourse between Britain and the Continent during the first century after Christ.

JOHN EVANS.

ROMAN COINS FOUND IN INDIA.

To the Editor, *The Numismatic Chronicle*, London.

SIR,—It is not often that Roman coins are found in the Panjab. Hitherto, a few aurei and fewer denarii are all that have come to light. Last autumn, however, there was a find of denarii in Pakli, a part of the Hazāra district beyond Mansehra, which is sixteen miles north of Abbottābād. The coins got into the hands of the Pindi dealers. Up to the present we do not know how many were obtained. The following types have been secured:—

Denarius of	Obverse.	Reverse.
Cassia gens.	Head of Vesta; to r. a lamp, to l. L	Standing figure voting. LONGIN. IIIV.
Curtia „	Head of Roma.	A biga. M. SILANVS.
Plancia „	Head of Diana. CN. PLANCIVS AED. CVR. S. C.	Goat.
Pompeia „	Head of Pompey. SEX. MAG. PIVS IMP.	Pietas with branch in r. hand. PIETAS.
Scribonia „	Head of Bonus Even- tus. BON. EVENT. LIBO.	Altar, a lyre hung on each side, the middle decorated with branches. Above, PVTEAL.; below, SCRIBON.
Julius Cæsar	Head of Venus.	Æneas carrying Anchi- ses and palladium.
Marc Antony	Bust of Marc Antony. M. ANTONIVS IMP. IIIVIR R.P.C.	Female with cornuco- pia. PIEAS COS.

Denarius of.	Obverse.	Reverse.
Brutus	Head of Liberty. LIBERTAS	Lyre, flower, &c. CAEPIO BRVTVS PROCOS.
Augustus	Head of Emperor. AVGVSTVS DIVI F.	Apollo. IMP. X ACT.
"	Two heads jugate. Q. RVSTIVS FOR- TVNAE ANTIAT.	Altar. CAESARI AV- GVSTO EX S. C.; on altar, FOR. RE.
"	Quadriga. CAESARI AVGVST.	Toga, wreath, eagle standard:—S.P.Q.R. PARENT . CONS. SVO.
"	Head of Emperor. CAESAR AVGVS- TVS.	Wreath. OB CIVIS SERVATOS.
"	Head of Emperor. CAESARI. (AVG) VSTO.	Temple of Mars, with warchariot. S.P.Q.R.
"	Head of Emperor. CAESAR AVGVS- TVS.	Eagle standard, shield trophy. S.P.Q.R. SIGNISRECEPTIS.
"	Head of Emperor. CAESAR AVGVS- TVS DIVI F. PATER PATRIAE	Two draped figures and two shields. C. L. CAESARES AV- GVSTI F. COS. DESIG. PRINC. IV- VENT.
"	Do.	Variety of above.
"	Do.	Do.
"	Head of Octavius in a lined circle.	Winged Victory stand- ing on a globe, wreath in r. hand, palm on l. shoulder. CAESAR DIVI F. across the field.
"	Head of Octavius.	A statue. IMP. CAESAR.
"	Head of Emperor, to l. AVGVSTVS.	Portico of temple with six pillars. IOVI OLV.

Denarius of	Obverse.	Reverse.
Tiberius	Head of Emperor. TI. CAESAR DIVI AVG. F. AVGVS- TVS.	Quadriga. IMP. VII. TR. POT. XVII.
„	Do.	Jupiter seated. PONTIF. MAXIM.
Hadrian	Head of Emperor. IMP. CAESAR TRA- IAN. HADRIANVS AVG.	Seated figure. SAL. AVG.

Here are twenty-one distinct denarii, all of the Republic or of early emperors. The Roman coins found in Madras are generally aurei, and of later emperors.

CHAS. J. RODGERS.

MOHAMMEDAN COINS.—The following is a list of some Moham-
medan coins which I have recently obtained, examples of
which do not appear in Mr. Stanley Lane-Poole's Catalogue of
the National Collection at the British Museum. I am unable to
trace, also, any description of similar coins in the Volumes
hitherto published by the Bibliothèque Nationale of the French
Collection.

'ABBĀSĪ KHALIFs:

- El-Hadī. AR. Med.-es-Selām, 170 (Rev. ^{أبر}_{هيم}).
- Er-Rashīd. AR. Med.-es-Selām, 172, differs only in date from
B.M. No. 210^b.
- El-Mamūn. AR. Fāris, 202, 203
(Obv. ^{المشرق} Rev. ^{لله}_{ذو الرياستين}).
- AR. Mişr, 201
(Obv. ^{سليم} Rev. ^{لله}_{الفضل}
ذو الرياستين).
- El-Moatasim. AR. Fāris, 219, 226.
- El-Mntawekkīl. AR. Mişr, 240 (Obv. ^{المعتز بالله}).
- AR. Işbahān, 234.
AR. Med.-es-Selām, 247 (Obv. ^{المعتز بالله}).

- El-Musta'in. *A.* El-Mohammediya, 249.
R. Kum (بقم), 250.
- El-Mo'temid. *A.* Sarra-men-raä, 260, 264.
A. Şan'ā (بصنا), 274.
A. Med.-es-Selām, 265, 271
R. Isbahān, 259, 264.
R. Wāsīt, 258.
- El-Mukṭedir. *A.* Şan'ā, 313, $\frac{1}{2}$ dinar.
A. Ḥalab (بحلب), 304.
A. Sūk-el-Ahwāz, 317.
A. Tarsus (بطرسوس), 308.
R. Kūfa, 297, 298, 302, 306, 307.
R. Med.-es-Selām, 315.
R. Wāsīt, 308.
- El-Kāhir. *A.* Tuster-min-el-Ahwāz, 322.

Obv.	لا اله الا الله وحده لا شريك له ابو القاسم بن امير المؤمنين	Rev.	لله محمد رسول الله لله القاهر بالله لمنتقم من اعدا الله لدين الله
------	----------------------------------------------------------------------	------	-------------------------------------------------------------------------------

I think this is the first gold piece of El-Kāhir published.

İDRİSİS:

- Khalaf. *R.* Todghah (بتدغه), 175. *Rev.* خَلَفَ.
 Margin مما امر به خلف بن المطا امر بالحق
 والوفاء على البر والتقوى بركة من الله

AGHLADĪS:

- Ibrāhīm 2. *A.* No mint, 272.

TŪLŪNĪS:

- Khumāraweyh. *A.* Miṣr, 271.
 Hārūn. *R.* Dimashk, [28]7.

IKHSHĪDĪS:

- Abū-l-Kāsim. *A.* Filistīn, 347.

SAFFĀRĪS:

- 'Amr ibn El-Leyth. *R.* Shīrāz, 282.

SĀMĀNĪS:

- Nāsir 2. *R.* Esh-Shash, 321.
R. Samarkand, 331.

GHAZNAWIS:

Mahmūd. *N.* Neysābūr, 415.

BOWYRHIS:

'Aḍud-ed-dawla. *R.* El Shebarḳān (بالشبرقان), 365.

Şamşām-ed-dawla. *R.* Kard-Fennā-Khusrah, 382.

SELJŪKS:

Tuḡhril Beg. *N.* Neysābūr, 434.

Alp-Arslān. *N.* Med.-es-Selām, 462.

Bargiyāruḳ. *N.* Isbahān, 488, 489.

N. Med.-es-Selām, 492, 493.

FĀTIMĪS:

El-Mahdī. *N.* El-Kayrawān, 299.

N. El-Mahdiyya, 314, 317.

El-Mo'izz. *N.* No mint, 352, 356 (like B.M. 28^e).

El-'Azīz. *N.* El-Mansūriya, 370.

N. El-Mahdiyya, 380.

N. Mişr, 365.

El-Hākim. *N.* El-Mansūriya, 411.

Eḡh-Ḍhāhir. *N.* Filistīn, 412.

N. El-Mansūriya, 426.

El-Musta'li. *N.* Mişr, 490.

El-Amir. *N.* 'Asḳalān (بعلقلان), 510.

N. Şūr (بصور), 509, 511, 514.

N. Mişr, 503, 515.

AYYŪBĪS:

El-'Adil. *N.* El-Kāhirah, 610.

BAHRĪ MEMLŪKS:

El-Kāmil Seyf-ed-dīn Sha'bān. *N.* El-Kāhirah, 747.

El-Muḍhaffar Seyf-ed-dīn Hājji. *N.* El-Kāhirah, 747.

En-Nāsir Nāsir-ed-dīn Hasan. *N.* Dimashḳ, 750.

El-Ashraf Nāsir-ed-dīn Sha'bān. *N.* El-Iskenderiya, 766.

BURJĪ MEMLŪKS:

En-Nāsir Nāsir-ed-dīn Faraj. *N.* El-Kāhirah, 801 (like B.M. 643).

El-Ashraf Kānsūh El-Ghūrī. *N.* El-Kāhirah, 913 (like B.M. 691).

EL-MURĀBITĪN:

Abū-bekr ibn 'Omar. *N.* Sijilmāseh, 491.

Yūsuf ibn Tāshifin. *N.* Aghmāt, 492.

'Alī ibn Yūsuf. *N.* Nūl-Lamṭah, 534.

MONGOLS OF PERSIA:

- Abaga. *A.* Baghdād, 663.
 Arghun. *A.* Baghdād, 686.
 Suleymān. *A.* Hamadhān, 745.
 Nushirwān. *R.* Tebrīz, 748.

JELAIRS:

- Sheikh Oweys. *R.* Tebrīz, 762.
 R. Baghdād, 762, 764.
 R. Ḥalab, 763.

TIMŪRIS:

- Shāh Rukh. *R.* Aberkūh, 829.
 R. Samarqand, 833.
 R. Sārī, 849.
 R. Herāt, 830.
 R. Yezd, 835, 845.
 Mohammed (Governor of Irāk). *R.* Yezd, 851.

MANGITS:

- Haidar Tora. *A.* Bokhārā, 1217.
 R. Bokhārā, 1230.

KHĀNS OF KHOḠAND:

- Khudāyār. *R.* KhoḠand, 1268, 1273.
 R. KhoḠand, 1285.

'OTHMĀNLIS:

- Suleymān I. *A.* Dimashk, 927.
 A. Āmid, 926.
 A. Mişr, 934.
 Selīm II. *A.* Constantinople, 974.
 Murād III. *A.* El Jezāir, 982.

J. M. C. JOHNSTON.

XI.

ON FINDS OF ARCHAIC GREEK COINS IN LOWER EGYPT.

(See Plates XV., XVI.)

IN March, 1898, I bought nineteen archaic Greek coins from Mr. J. S. Khaouan, in the Cairo Bazaar. They came from a find made in 1897 at Sakha, near Kufr-El-Cheik, in Lower Egypt. These coins were, however, only part of the find; seventeen others had been acquired by Mr. G. Dattari, of Cairo, and the remainder, probably about fifty, had been dispersed. I am able to make some mention of Mr. Dattari's acquisition;¹ but I have not succeeded in finding out anything about the remainder.

I shall first give a description of the nineteen coins of this find, and then of two other small finds of Cyrenaic coins, as such descriptions may assist in throwing light on various matters of interest, for instance, on the earliest coinages of different Greek towns and islands, especially when taken together with the publications of similar finds, such as Dr. Head's account of the "Coins discovered on the Site of Naukratis" (*Num. Chron.*, 1886, p. 1), and Canon W. Greenwell's "On a Find of Archaic Greek Coins in Egypt" (*Num. Chron.*, 1890, p. 1), and Mariette's find,

¹ See Postscript.

published in the *Revue Numismatique*, 1861, p. 414, "Monnaies du Sérapéum de Memphis." It ought to be mentioned that only a small portion of the "Coins discovered on the Site of Naukratis" can be regarded as similar to the archaic finds described here, and by Canon Greenwell, and to the Mariette find, namely those described as "The Silversmith's Hoard," fourteen in all, while the greater number was found separately in or near the ruins of the town.

1. DICAEA IN THRACE.

R. 4. 145 grs. [Pl. XV. 1.]

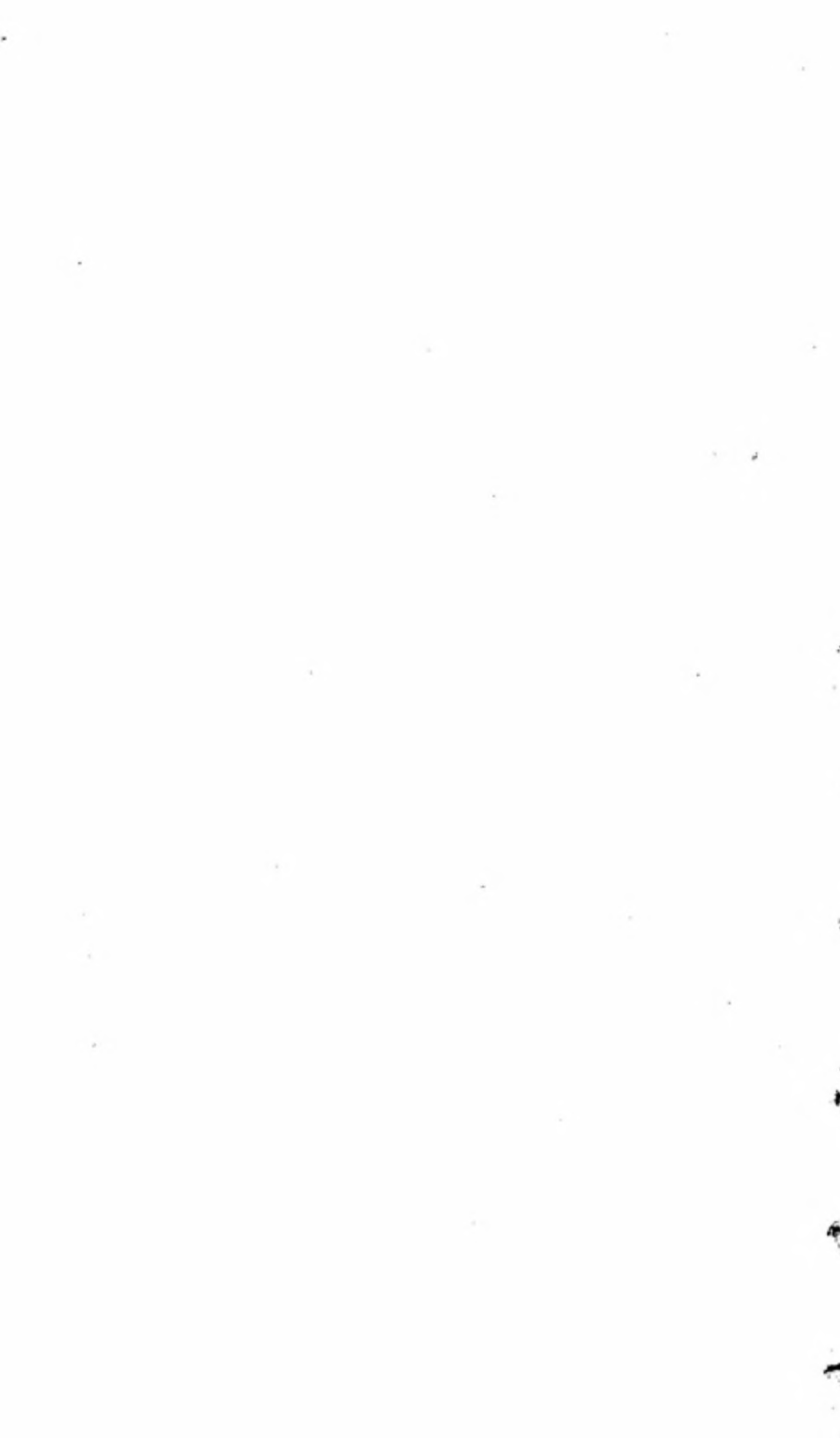
Obv.—Archaic head of bearded Heracles r.

Rev.—Square incuse, divided diagonally, by two rather broad bands, into four triangular spaces.

In Canon Greenwell's description of the Egyptian find, just mentioned, there is a tetradrachm (Pl. I. 1) of similar, though not identical, nature. On the tetradrachm, the head is turned to left, the face and the lion's skin are rather differently treated, and the incuse is divided into four square, not triangular spaces. The weight of the tetradrachm is 284 grs., while that of the didrachm before us is 145 grs., which would give a tetradrachm of 290 grs. The weight of a better-preserved similar didrachm in my possession is 150 grs., which would bring the tetradrachm to 300 grs. These differences between the didrachm and the tetradrachm render perhaps the assumption of their belonging to the same place slightly uncertain; but I am inclined to think that they do, although they were not issued at the same time. As to the difference in the incuse of this didrachm and of the tetradrachm, we may point out that some towns of



ARCHAIC GREEK COINS FROM LOWER EGYPT.



Macedon have sometimes diagonal divisions, sometimes square, for instance Neapolis and Lete; and as to weight, Canon Greenwell states that Mr. Löbbecke, of Brunswick, has a similar tetradrachm weighing 296 grs.

2. LETE.

Æ. 4. 146 grs. [PL. XV. 2.]

Obv.—Naked ithyphallic Satyr, with horse's feet, standing to right, holds by her right wrist a woman, clothed in a long, sleeveless chiton; she proceeds to the right, but turns her head backwards towards the Satyr. The hair arranged in beads.

Rev. Deep square incuse, undivided.

3. LETE.

Æ. 4. 146.2 grs. [PL. XV. 3.]

Obv.—Similar to No. 2, but with two pellets in right field; much worn.

Rev.—Rough square incuse, with indication of diagonal division.

4. LETE.

Æ. 4. 146 grs. [PL. XV. 4.]

Obv.—Similar to 2 and 3, but two pellets in right field, and one, or probably two; in left field.

Rev.—Incuse square, divided by thick diagonal lines into four triangular spaces.

These three coins of Lete are of thick fabric, and of a very early period; No. 2 is probably older than 3 and 4, to judge from the small deep undivided incuse. A similar coin was in the find described by Canon Greenwell, and figured in his Pl. I. 3; and the Mariette find contained

likewise one; none was brought to the Museum from Naukratis.

5. NEAPOLIS OF MACEDON.

AR. 5. 147·5 grs. [Pl. XV. 5.]

Obv.—Gorgon's head with large ears, protruding tongue, and very fierce expression; the hair falling in curls over the forehead.

Rev.—Incuse square, divided diagonally into four triangular spaces, three deep, one flat.

This coin is better preserved than that in Canon Greenwell's description (Pl. I. 6); it has lost less in weight than the latter, which weighs only 138·7. Both coins are different from those in the Catalogue of the British Museum, of which Nos. 2 to 7 have another incuse, viz., the partition into four squares, which is also the case with the specimen figured in Head's *Hist. Num.*, p. 175, Fig. 116. Canon Greenwell says: "It would be impossible to separate these coins attributed to Neapolis from those, precisely similar in type, given to Euboea, except by their weight, those of Neapolis, like the early coins of Thasos, being according to the Babylonian, those of Euboea according to the Attic standard." The weight is, no doubt, the most important point of distinction; but on careful comparison we discover other differences. The whole appearance of the head is different, the expression of the face on the archaic Neapolis coin is very fierce, while that on the Eretrian presents something like a broad grin; the nose on the latter is better formed, especially the bridge; the same is the case with the forehead; the curls are likewise differently arranged, as also the teeth and the tongue. Probably the Eretrian coins

are of somewhat later date than the coin of Neapolis here described.

6. AEGINA.

R. 5. 191 grs. [Pl. XV. 6.]

Obv.—Tortoise with plain shell, and single row of eight dots down the centre of the back.

Rev.—Incuse square, divided into eight triangular compartments, of which five are more or less deep.

7. AEGINA.

R. 5. 183 grs. [Pl. XV. 7.]

Obv.—Similar tortoise, with single row of nine dots.

Rev.—Similar incuse.

Coins of Aegina often form a considerable proportion in the finds of archaic coins; but the four Egyptian finds with which I am acquainted contain only a small proportion. The hoards of Santorin (Thera) described by Mr. Warwick Wroth in the *Num. Chron.*, 1884, pp. 269 to 280, and a similar one of a later date, described by Canon Greenwell in the *Num. Chron.*, 1890, pp. 13 to 19, contained a large number of Aeginetan staters. The two staters (6 and 7) just mentioned belong to the earliest coinage, while the one described by Dr. Head, in the silversmith's hoard of Naukratis, are of a somewhat later period, when on the back of the tortoise the single plates were indicated.

8. CORINTH.

R. 5 by 7. 104 grs. [Pl. XV. 8.]

Obv.—Bridled Pegasus with curled wings, cantering to left; the koppe is not visible.

Rev.—Incuse square, divided into eight triangular spaces, of which four are sunk in, while four are flat; on the latter, however, are further small sunk in spaces.

This coin deserves special notice. The flan is large, very irregular in shape, and thin. It resembles the coin described by Canon Greenwell as part of the former find (Pl. I. 8). The incuse is, as he remarks, rather similar to that on the earliest coins of Aegina, but it is still more like that on early coins of Mende, as represented in *Cat. Brit. Mus. (Macedon)*, p. 80, 1, and in Head's *Guide to the Coins of the Ancients* (Pl. IV. 8), where, in addition to the larger incuse spaces, are smaller ones on the flat spaces, as on our specimen of Corinth, which is older than the earliest coin in the Catalogue of the British Museum. There is a similar coin in Mariette's find, on which likewise no koppa is visible, and as Canon Greenwell's coin, which is now in the British Museum, shows, on further examination, no distinct trace of it, I am inclined to assume that these earliest coins of Corinth bore no inscription, in the same way as the earliest issues of other towns are anepigraphous. To the question of the weight, I will return after the description of two other specimens of Corinth.

9. CORINTH.

Æ. 6. 102 grs. [Pl. XV. 9.]

Obv.—Bridled Pegasus walking to left; ♀ beneath belly.

Rev.—Incuse indistinct, nearly plain, but traces of sinkings in spaces visible (?)

The obverse is similar to *Cat. Brit. Mus.*, Pl. I. 2, and Head's *Hist. Num.*, p. 335, Fig. 222, with the

swastica pattern on the reverse; but the weight is different.

10. CORINTH.

Æ. 5½. 101·2 grs. [Pl. XV. 10.]

Obv.—Bridled Pegasus cantering to left; ☿ beneath.

Rev.—Plain, with slight traces of sinkings in spaces.

The obverse resembles *Cat. Brit. Mus.*, I, 4, which has the swastica pattern on the reverse.

The weight of all the three coins is almost the same, and that described by Canon Greenwell (Pl. I. 8) is only slightly heavier. They are considerably lighter than all the staters described in the *Cat. Brit. Mus.*, and probably belong to another standard. If we consider the evident loss of weight which these four coins of Egyptian finds have sustained, we may, I think, regard them as Phoenician didrachms, which Dr. Head, in his *Guide to the Coins of the Ancients* (1881, p. 121), gives as 112 grs.

11. NAXUS (CYCLADIAN ISLAND).

Æ. 5. 179 grs. [Pl. XV. 11.]

Obv.—Cantharus with a bunch of grapes hanging from each handle, that on the left being rather smaller than that on the right; above, ivy-leaf (?).

Rev.—Incuse square, divided into four smaller ones.

This coin is absent in the find described by Canon Greenwell, but occurs in Mariette's find. The ornament above the cantharus does not look like an ivy-leaf; it may, however, possibly be intended for it.

12. PAROS.

Æ. 5. 189.2 grs. [Pl. XV. 12.]

Obv.—Goat to right, looking back, right foreleg bent; beneath, dolphin to right.

Rev.—Incuse square, divided into six triangular spaces, four deep, two flat.

This coin is very similar to Fig. 259 in Head's *Hist. Num.*, and Pl. XXVI. 1 in the *Cat. of Brit. Mus.* It belongs probably to one of the earliest issues of the island, before 500 B.C.

13. MYTILENE ON LESBOS.

Æ. 2½. 60 grs. [Pl. XVI. 1.]

Obv.—Calf kneeling to left; on its back, cock to right.

Rev.—Square incuse.

When I saw this hitherto unknown drachma, my first impression was, that it belonged to Euboea, but our late friend Dr. J. P. Six pointed out to me that the quadruped was neither the cow nor the bull of Euboean coins, but a calf, and that the bird was not the cock of Carystus, but that occurring on Lesbian electrum (see Head, *Hist. Num.*, p. 484, Fig. 293). Most of these electrum coins were probably issued at Mytilene, and as the calf is a type of Mytilene, we may attribute this coin to Mytilene, and regard it as the oldest silver coin of this town as yet discovered, although it is probably one of the latest coins of this find.

14. CHIOS.

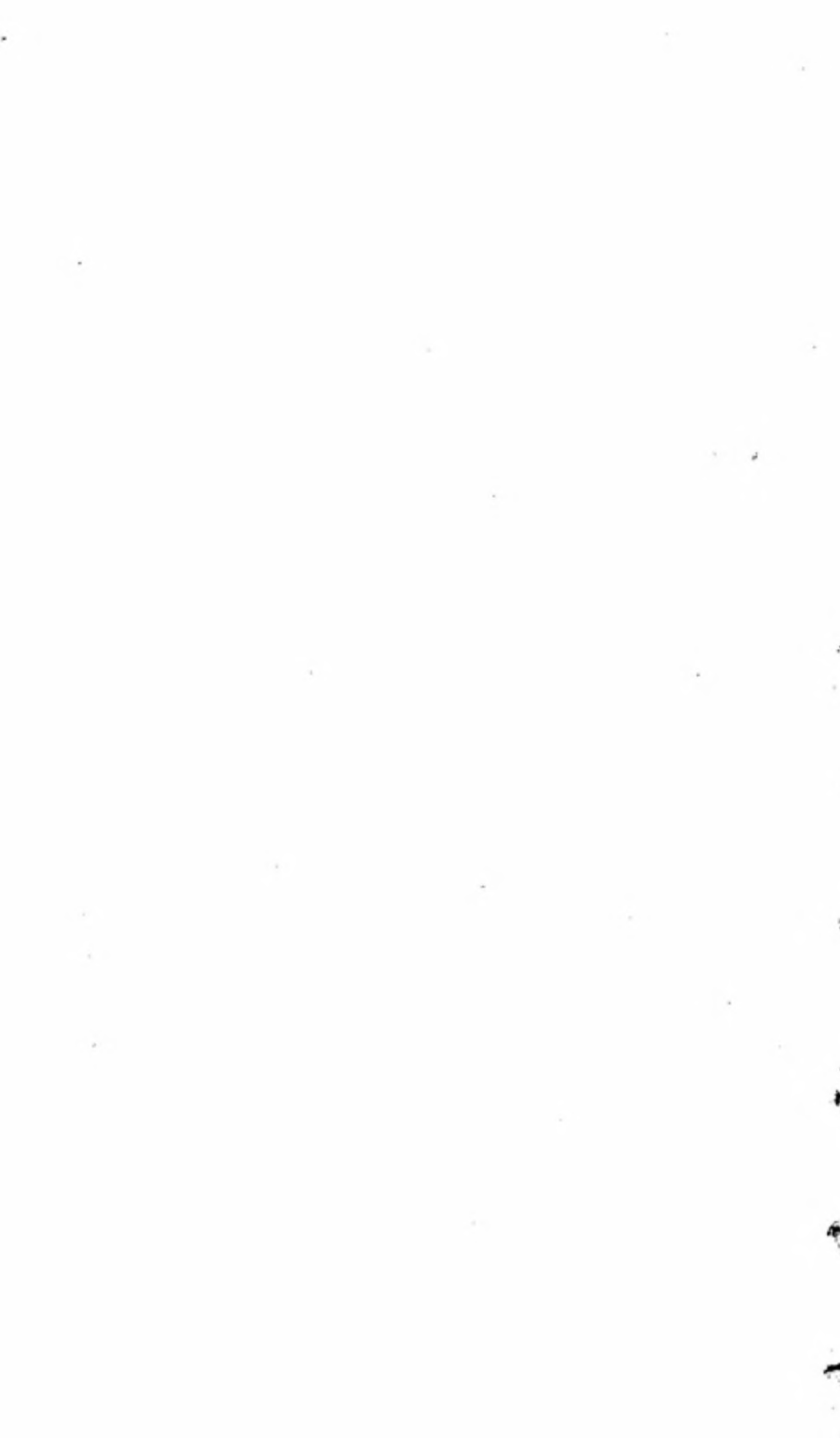
Æ. 3. 113.6 grs. [Pl. XVI. 2.]

Obv.—Sphinx seated left, with curled wings, resting on both forepaws; faint traces of plume on large head.

Rev.—Rough incuse square.



ARCHAIC GREEK COINS FROM LOWER EGYPT.



This coin is similar to that in Canon Greenwell's publication (*l. c.*, p. 4, Pl. I. 16), where the principal differences from the usual early staters are already indicated, viz., the lower weight, the plume on the head of the sphinx, the absence of the amphora, and the plain incuse instead of the quadripartite. We might add that the head is larger, the neck shorter, and the whole figure more stumpy. The plume on the present coin is not distinct, owing to oxidation and bad cleaning. The coin belongs to the sixth century B.C.

15. CHIOS.

Æ. 8½. 115·5 grs. [Pl. XVI. 3.]

Obv.—Sphinx seated to left, right forepaw raised.

Rev.—Deep incuse square.

The sphinx differs from that on No. 13, by the right forepaw being raised. The part of the head which would perhaps show the plume is off the flan. The incuse shows indistinct signs of partition.

16. CHIOS.

Æ. 4½ by 2½. 111·8 grs. [Pl. XVI. 4.]

Obv.—Sphinx seated to left, right forepaw raised; "plume" on head; border of dots.

Rev.—Deep incuse square, divided into four squares of unequal size.

This coin is evidently of rather later date than Nos. 14 and 15 of this find, and the one in Canon Greenwell's publication referred to under No. 14; the workmanship of the sphinx, the border of dots, and the division of the incuse, point to it; it is, however, probably earlier than

the coins in the Catalogue of the British Museum. The plume on the head is quite distinct, though it is less erect than on Canon Greenwell's coin, and hangs down over the back of head and neck, and looks less "plumelike."

Nos. 15 and 16 differ from all the other silver coins of Chios, by having a sphinx with the right fore-paw raised; all the other silver coins have a sphinx which rests on both fore-paws. The usual position of the sphinx of Chios differs in this respect from the position of the griffin of Teos, which sits with one of the fore-paws raised. On most of the copper coins of Chios one of the fore-paws is raised, on some the right, on others the left. The "silversmith's hoard" at Naukratis contains a stater of Chios, which, I should say, is decidedly later than the specimens here described; the Naukratis coin is heavier, and the obverse has the usual amphora, while ours are without.

17. UNCERTAIN (COLOPHON ?)

R. 8½. 84.4 grs. [Pl. XVI. 5.]

Obv.—Neckless and beardless head facing, with large, off-standing ears, and widely opened, staring eyes.

Rev.—Deep incuse square, without distinct divisions.

It seems difficult to attribute this peculiar head to any divinity. The expression of the face is very fierce; it is almost that of a Gorgon, but the hair and the mouth are very different from what we find on the archaic Gorgons' heads of Neapolis in Macedon, and also from those of Euboea. The head has no horns, and the ears, though peculiarly large and offstanding, are not those of a goat or bull, but are human ears, which are not used on Pans' or Satyrs' heads. The absence of horns excludes also

river gods. Amongst the small coins which Dr. Imhoof-Blumer, in his article in the *Num. Chron.* of 1895, "Griechische Münzen," has attributed to Kolophon, are some with heads of Apollo (Pl. X., Nos. 10 to 15), not unlike the head on this coin, if we take into consideration that the coins described by Dr. Imhoof are of decidedly later date. Thus I have reluctantly become inclined to ascribe this rude and unbeautiful head to Apollo. The British Museum possesses two pieces which are probably from the same die as mine; and the Photiades coin (Cat. No. 1392), seems likewise from the same die, as also the coin described in Montagu's second sale of Greek Coins (No. 236). The British Museum, however, possesses, amongst its uncertain coins, another archaic drachma, of which I am permitted to give here a description, on account of the light which it seems to me to throw on No. 17.

R. 3½. 86·7 grs. [Pl. XVI. 6.]

Obv.—Beardless head (Apollo?) facing, with long ringlets on either side.

Rev.—Incuse square, with indication of quadripartite division.

This coin appears to me to belong to the same place as No. 17, but to be of a slightly later date; the head is much more Apollo-like, and thus strengthens the view that the head on our coin is that of Apollo. Another, but much smaller and later coin, in the British Museum, may perhaps belong to the same locality.

R. 2. 9·8 grs. [Pl. XVI. 7.]

Obv.—Neckless and beardless head facing.

Rev.—Dolphin to left; below, murex; all in incuse square.

Are we justified in ascribing these coins to Colophon? The weight is not against it; the beautiful drachma of Colophon with the laureate head of Apollo in profile on the obverse, and the lyre on the reverse, weighs from 83 to 86 grains, and the coins under consideration have about the same weight.

Another possibility would be that Delos, the seat of the Apollo worship, had in the earliest times the head of Apollo as its type, and adopted the lyre somewhat later; but I am more in favour of Colophon, though I do not consider this attribution as established.

18. CYRENE.

R. 4½. 122·2 grs. [Pl. XVI. 8.]

Obv.—Three buds of silphium, radiating from the centre, in which is a pellet surrounded by a plain circle. The upper portion of the type is almost off the flan; it consists probably of a boar. Around the whole is a nearly plain border.

Rev.—Square incuse, diagonally divided into four triangular spaces, three deep, one flat.

The coin is not in Müller's *L'Ancienne Afrique*, but the obverse is similar to his No. 15, and the reverse to his No. 7.

In the find described by Canon Greenwell is a Cyrenaic stater similar to Müller's No. 17, on p. 11; Mariette's find, too, contains a Cyrenaic didrachm, but of a somewhat different type.

19. CYRENE.

R. 4. 117 grs. [Pl. XVI. 9.]

Obv.—Six buds of silphium, spreading from a pellet in the centre, which is surrounded by a circle of dots or small pellets. In the space between two buds

is an object which is partly off the flan; it is probably the fore-part of a boar to left. Border of dots.

Rev.—Incuse rather flat, diagonally divided into four unequal triangles.

This coin, likewise, is not in Müller's *L'Ancienne Afrique*, but it is rather similar to his No. 15, p. 10, which was then in the "Coll. of Lord Strangford." The latter has on the obverse only three buds and three pellets, occupying half of the flan, while the remainder is taken up by a boar to left. The reverse of Lord Strangford's coin has a square incuse, divided into four square fields. A coin in my collection, similar to Lord Strangford's, weighs 131 grains. We may presume that both Nos. 18 and 19 have lost some grains by oxidation and cleaning.

Of the 17 coins of the Sakha find, which have been acquired by Mr. Dattari, of Cairo, I can give only a very imperfect account. They include archaic staters of Thasos, Leto, Aegina, Eretria, Corinth, Naxos, Seriphus, and Teos, and subdivisions of the Thracian Ohersonesus, Idyma, Cyrene, and two others in a poor state of preservation.

The most important coin, not represented in any of the other finds, is:—

R. 4½. [Pl. XVI. 10.]²

Obv.—Owl facing, three-quarters right; wings expanded.

Rev.—Incuse square, divided by two broad bands into four squares.

The weight is not known to me, and I am uncertain whether there are any letters on the obverse.

² See about this coin in the postscript.

These finds of archaic Greek coins in Egypt make us ask the question, under what circumstances they came there? In the Mariette hoard of Myt-Rahineh, the coins were found together with pieces of old silver in an uncoined condition, and there can scarcely be any doubt that they formed part of the contents of the shop of a silversmith. We see a similar thing very often, when we find, especially in country towns, in the shops of jewellers and watchmakers, old silver coins together with other old objects of silver, which are used as metal by the owners in their work. Of the coins found at Naukratis, those described by Dr. Head as "The Silversmith's Hoard" confirm this view.

In the other finds we are not sure whether other pieces of old silver were found together with the coins.

I quite agree with the view of Mr. Dutilh, of the Greek Museum of Alexandria, that the coins were bought by Egyptian merchants and tradesmen as old silver, and that the Egyptians, who had no silver mines, obtained in this way their silver from Greek traders. This view is further strengthened by the fact that the Museum of Alexandria quite lately received a present of a hoard found in Lower Egypt, consisting of a large number of pieces of uncoined silver, varying in weight from 86 grammes to a few decigrammes.

A peculiarity of the finds of Greek coins in Egypt is, that they almost all consist of archaic coins, and that no find has, as far as I know, been made of coins belonging to the period of fine style. In the hoard described by me, not a single coin of those which came into my possession is even of the early transitional style, unless we regard as such No. 13. The remainder are earlier than 500 B.C. When discussing the cause of this peculiarity in the

Medal Room of the British Museum, Dr. Head suggested the conquest of Egypt by the Persians; and this, I think, is the most plausible explanation. The Persian domination commences at about 525 B.C. As the Persians were well supplied with silver, they did not require silver from Greek traders. Now and then, during the beginning of the Persian rule, and during the revolts of the Egyptians, supported by the Greeks, some Greek silver coins of a rather later date may have found their way into Egypt, but their number must have been very small. The matter is rather different with a place like Naukratis, which continued to exist as a Greek trading place during the Persian rule.

Another circumstance, which may be noted here, is the almost complete absence of coins of Magna Graecia and Sicily, and the great rarity of Athenian coins.

It may be of interest to add here a description of some small Cyrenaic coins, of which Nos. 20, 21, 22, and 23 were bought at Alexandria in March, 1898, and had been found between Ramleh and Alexandria; while Nos. 24 to 28 were bought, in March, 1894, likewise at Alexandria, and said, at that time, to be portions of a recent find, near a railway station, not far from Damietta.

20. CYRENE.

R. 1½. 31 grs. (hemidrachma). [Pl. XVI. 11.]

Obv.—Fruit of silphium, heart-shaped, with its pericarpium, surmounted by lion's head left.

Rev.—Incuse square, within which is a linear square, which is divided by parallel lines from above downwards, and from side to side, into numerous small squares slightly rhombic or oblique-angled.

21. CYRENE.

R. 1 $\frac{1}{4}$. 30.6 grs. (hemidrachma). [Pl. XVI. 12.]

Obv.—Heart-shaped fruit of silphium in its pericarpium; above, cake of silphium, which is surmounted by a jerboa.

Rev.—Similar to No. 20.

Müller has no description of a reverse like Nos. 20 and 21. The mint of Cyrene is remarkable for the number of varieties of the incuses. The obverse of No. 21 is interesting by having on the top of the fruit the cake of silphium, on which the jerboa seems to feed. The jerboa is represented by Dr. Imhoof-Blumer in his *Thier- und Pflanzenbilder auf Münzen* (1889) on two Cyrenaic coins, Pl. II. 5 and Pl. VI. 35. The species of the jerboa, the German "spring-maus," jumping mouse, is probably the *Dipus aegyptiacus*. The cake or pulp of silphium, prepared from the fruit, is represented on Müller's No. 12, on p. 10. The cake was probably the preparation in which the principal trade was carried on (*conf.* Müller, *l. c.*, p. 16).

22. CYRENE.

R. 1. 14.6 grs. (trihemiobolon?). [Pl. XVI. 13.]

Obv.—Fruit of silphium; above, two dolphins (?), meeting in the centre, from right and left.

Rev.—Incuse square, containing silphium plant.

Two dolphins occur on other archaic coins of Cyrene, as on Müller's No. 21, on p. 11. The fruit of silphium is on this coin represented without the pericarpium.

23. CYRENE.

R. 1½. 31·5 grs. (hemidrachma). [Pl. XVI. 14.]

Obv.—Forepart of boar to left.

Rev.—Incuse square, divided by a bar into two oblong squares of unequal size, ornamented with irregular linear figures.

The art on this little coin is very peculiar. The artist seems to have been fond of outlines; the ribs of the boar look almost like part of a skeleton without flesh. There are two lines above the neck of the animal, but I scarcely think that they are intended for letters. The reverse is a further illustration of my remark that the Cyrenaic mint revels in varieties of reverses; on a coin in the British Museum there is a rather similar reverse. The boar occurs repeatedly on coins of Cyrene, as an additional part of the type; but I do not know another Cyrenaic coin on which it forms the entire type.

24. CYRENE.

R. 2. 41·3 grs. (tetrobol). [Pl. XVI. 15.]

Obv.—Six silphium buds around a ball, contained in circle of dots; in the space between two buds is a head to left, which may be that of a fish or a ram (?)

Rev.—Incuse square, divided diagonally into four triangular spaces, three sunken, one plain.

This tetrobol is not described in Müller's *L'Ancienne Afrique*. The head between the silphium flowers is different from the other animal objects occurring on Cyrenaic coins; it resembles most the head of a ram or a fish, but we have not met the ram on any other coin of Cyrene, and the only fish otherwise seen on Cyrenaic coins is the dolphin, whose head is rather unlike the present one.

25. CYRENE.

AR. 1. 20·7 grs. (diobol). [Pl. XVI. 16.]

Obv.—Six buds of silphium, around a ball, enclosed in a circle of dots.

Rev.—Incuse, diagonally divided into four triangular spaces, partly filled up.

This coin is likewise absent from Müller; it may, perhaps, be regarded as a lower division of the preceding coin (24); and both as one-fourth and one-sixth of the staters Nos. 18 and 19 of this publication.

26. CYRENE.

AR. 2. 55·5 grs. (drachma). [Pl. XVI. 17.]

Obv.—Fruit of silphium, with sprout from the centre of the top; indistinct ornamentation round the margin.

Rev.—Incuse square, divided by two lines from side to side, and two from above downwards into nine square spaces.

The coin is probably restruck.

27. CYRENE.

AR. 2. 47·8 grs. [Pl. XVI. 18.]

Obv.—Heart-shaped fruit of silphium with pericarpium; pellet above and below.

Rev.—Flat incuse, which contains a heart-shaped fruit of silphium with pericarpium, and a pellet above and below.

The weight is peculiar; it is too light for a drachma and too heavy for a tetrobol; but the Cyrenaic mint seems not to have been always exact with regard to the smaller divisions.

28. CYRENE.

AR. 1½. 80·4 grs. (hemidrachma). [Pl. XVI. 19.]

Obv.—Heart-shaped fruit of silphium in its pericarpium; a pellet above and below.

Rev.—Incuse, containing heart-shaped fruit of silphium in its pericarpium; a pellet above and below, and one in the left field.

Possibly we should see a pellet in the corresponding place of the right field, if there had not been a flaw in the die.

With regard to the pellets which so frequently occur on these archaic coins of Cyrene, we may presume, I think, that they were put in as ornaments.

Coins of Cyrene form a considerable proportion of the finds of archaic coins in Egypt, and this is, no doubt, due to the friendly relations between Cyrenaeans and Egyptians, especially during the reign of Amasis in Egypt. Herodotus says (II. 178), "Amasis, being partial to the Greeks, hath bestowed other favours on various of the Greeks . . ." And again (II. 181), "Amasis also contracted friendship and an alliance with the Cyrenaeans; and resolved to take a wife from that country, either out of desire of having a Grecian woman, or from some peculiar affection to the Cyrenaeans."

HERMANN WEBER.

P.S.—Quite lately, after this paper had been already in type, I have heard from the Director of the Coin Cabinet at Berlin, that the coins of the find originally acquired by Mr. Dattari (p. 269) have passed into the possession of the Berlin Museum, and will be published by the Director in the *Zeitschrift für Numismatik*. With regard to the coin described on p. 281, and represented on Plate XVI. 10, I have learnt that it does not belong to the find, but that it was acquired otherwise. I am not quite sure that it is genuine; but I have seen only a plaster cast, not the coin itself.

H. W.

XII.

THE AMPHORA LETTERS ON COINS OF ATHENS.

THE following attempt to determine the significance of the letters on the amphora on Athenian coins of the New Style has been suggested by the occasional occurrence among these of the letter N. As this phenomenon is generally attributed to mere carelessness on the part of the die-engraver, it will be necessary at the outset to consider whether such a method of disposing of the difficulty is satisfactory. Perhaps the simplest way of dealing with the question will be to summarise the evidence I have been able to get together.

To begin with, there are in the Hunterian collection two originals, on each of which a firmly cut N is clearly discernible. In addition, the kindness of correspondents in various centres has supplied me with casts of fourteen tetradrachms, on every one of which the mysterious letter is absolutely unmistakable. The numismatists who thus assisted me were careful to disregard all doubtful cases, and their names will serve as a guarantee of the correctness of the reading. They are M. Ernest Babelon, Mr. G. F. Hill, Dr. H. Gaobler, Professor B. Pick, Herr Löbbecke, Dr. E. Gabrici, and Dr. C. Joergensen. The following table exhibits the essential particulars regarding each specimen. The numbers of the series refer to Mr.

Head's well-known chronological arrangement. The list cannot, of course, be regarded as exhaustive.¹ At the same time it is probably more complete than would appear upon the surface, for Dr. Imhoof-Blumer and Dr. J. P. Six made ineffectual search in their own collections, as did Dr. J. W. Kubitschek at Vienna, Professor Riggauer at Munich, Dr. J. N. Svoronos in more than one collection at Athens, and Dr. Gabrici in the Museo Nazionale at Naples.

TABLE OF "N" COINS.

No.	Series.	Names of Magistrates.	Mint-mark.	Collection.
1	x.	Μ—Α	none	Brit. Mus.
2			"	Paris
3	xxiv.	ΚΤΗΣΙ—ΕΥΜΑ	ΜΕ	Berlin
4		ΕΥΡΥΚΛΕΙ—ΑΡΙΑΡΑ—ΚΑΛΛΙ	ΜΕ	Brit. Mus. ²
5	xl.	"	"	"
6		"	"	Copenhagen
7	xlvi.	ΜΕΝΕΔ—ΕΠΙΓΕΝΟ—ΑΡΙΣΤ	ΣΦ	Brit. Mus.
8		"	ΜΕ	Paris
9	lxiii.	ΗΡΑΚΛΕΙΔΗΣ—ΕΥΚΛΗΣ—ΔΙΟΚ	ΜΕ	Brit. Mus.
10	lxx.	ΤΙΜΟΣΤΡΑΤΟΣ—ΠΟΣΗΣ—ΑΠΟ	ΑΠ	Berlin
11		ΚΛΕΟΦΑΝΗΣ—ΕΠΙΘΕΤΗΣ	ΙΣΙ	Gotha
12	xc.	"	off coin	Santangelo
13		ΝΕΣΤΩΡ—ΜΝΑΣΕΑΣ	ΑΠ	Hunter
14	xcvii.	"	ΕΡ	"
15		"	"	Brit. Mus.
16		"	ΙΣ	Löbbecke

¹ Thus, I have not included three of the six pieces cited by M. Th. Reinach in the *Revue des études grecques*, vol. i., pp. 398 f., as I have been unable to trace the originals of the coins to which he refers. I should like to add that, as there is no file of the *Berliner philologische Wochenschrift* in Glasgow, I have, to my great regret, found it impossible to consult the article published in that journal in 1889, by Dr. Rudolf Weil.

² One of these is *B. M. C. Attica*, No. 411, where the letter on the amphora is given as Η. The other, from the same die, with a more distinct Ν, was purchased at the Bunbury Sale; see *Num. Chron.*, 1881, p. 87, where a coin similar to No. 9 is also described.

The three pieces belonging to series xl. are in all respects identical. Allowing for this, we still have fourteen different dies. Furthermore, of the eight series concerned, four are represented by more than one die each. Specially noticeable are Nos. 13-16, which bear the names of ΝΕΣΤΩΡ—ΜΝΑΣΕΑΣ. There we have four distinct dies, involving three different mint-marks, all cut within one and the same year. A moment's reflection on these facts will, I think, compel us to forthwith rule out of court the plea of an engraver's mistake. That plea was a mere *pis aller* of Beulé's. That it should have been widely accepted is surprising, and can only arise from an undue amount of reliance having been placed on his general accuracy. The *Monnaies d'Athènes* has many merits, but it would be difficult to find any other work of equal importance the details of which stand in such clamant need of verification.

The abandonment of the theory of an engraver's mistake necessarily involves the abandonment of the orthodox view as to the meaning of the letters on the amphora: if their number ever exceeds twelve, it is impossible that they should refer, as is usually supposed, to the number of the prytany during which the pieces were issued. For M. Théodoro Reinach's hypothesis, that the tetradrachms with Ν belong to the period during which there were thirteen tribes at Athens, has been effectually disposed of by Mr. Head (*Num. Chron.* 1889, pp. 229 ff.), who makes it quite clear that the great majority of the coins of the New Style are later in date than 200 B.C. There remains the theory that the numerals on the amphora indicate the calendar months. This was a possibility that suggested itself to Beulé (*op. cit.*, p. 130). Long afterwards it was taken up, only to be abandoned again, by M. Reinach,

who pointed out that it furnished an easy explanation of the difficulty now under discussion, since at regularly recurring intervals the Attic year had thirteen months instead of twelve (*Rev. des études grecques*, i., p. 164 (2)). Other numismatists have from time to time shown an inclination to accept it. But one and all have ended by setting it aside as a more or less plausible suggestion that did not admit of being definitely proved. Such definite proof I believe I am now in a position to give. As, however, the material at my disposal has been far from complete, the results I have arrived at cannot be regarded as final. I have indeed mainly confined myself to Beulé's lists, which I have subjected to a careful scrutiny—a process that it would have been quite impossible for me to carry out without the friendly co-operation of numismatists who have access to various public collections of which Beulé made use. The number of corrections I have been called upon to make is very considerable, and that, too, although I have limited my scrutiny to those cases where Beulé's own words suggest a doubt as to the correctness of his reading, or where he assigns to the amphora a letter that conflicts with the theory I hope to establish. Here and there I have supplemented him from such sources as lay ready to hand, notably the *British Museum Catalogue (Attica, &c.)*, Sir E. Bunbury's paper in the *Num. Chron.* for 1881, and the sale catalogue of the collection of Photiades Pacha.³

It is obvious that in dealing with this question attention must be concentrated on those series in which, over and above the names of the annual magistrates, we find a third

³ It will, however, be seen that I have not found myself able to accept, in all cases, the unverified readings of this last-mentioned work.

name which, like the letter on the amphora, changes frequently in the course of the year. A connexion between these two varying elements was suspected long ago by Rathgeber.⁴ It was strongly insisted upon by Beulé, who held that the letter was the signet or sign-manual of the controller responsible for the issue (p. 130), and that it therefore always denoted a magistrate or inspector, even in the many series where no third name appears (p. 112). If this theory were correct, we should expect that, where a third name does occur, that and the letter would invariably correspond to each other. And Beulé would wish us to believe that, as a rule, they do so. Even on his own showing, however, there are a large number of irregularities, and it is interesting to note how he gets rid of them. Where the irregularity is confined to a single specimen, the process is simple enough: if the coin is reported by somebody else, the reading is promptly declared to be erroneous; if he has seen it for himself, the troublesome letter is explained as "*erreur du graveur*." Where circumstances are such as to render both of these hypotheses untenable, recourse is had to "*la mort . . . une maladie, un départ subit, un congé obtenu, bien des motifs qui appartiennent à la vie privée*" (p. 132). Desperate as some of these remedies are, they are not sufficient; for occasionally the problem is frankly—and wisely—given up, "*tout n'est que confusion*" (p. 132).

It is thus by no means easy to accept Beulé's theory in face of the facts that he himself records. It is still less easy to do so when one has sifted these facts, and has found how many of his readings require correction. And

⁴ *Annales de l'Institut archéologique de Rome*, 1838, pp. 38 and 41.

what applies to Beulé's theory applies with equal force to the view that the letters indicate the prytanies. If, on the other hand, they denote the calendar months, we ought not to be surprised at occasional want of correspondence. Indeed, we ought actually to look for it. The duration of the third magistrate's term of office would naturally coincide with the prytany, and a glance at the *Corpus Inscriptionum Atticarum* will show that, even during the period of the twelve tribes, precise correspondence between the prytany and the calendar month was the exception and not the rule. The nature and extent of the difference will be discussed presently. In the meantime it will be sufficient to point out that very often a prytany must have extended from one calendar month into another, and that conversely one and the same calendar month must very often have covered portions of two prytanies. Under these circumstances we should expect to find upon the coins (1) instances where *one magistrate corresponds to two consecutive letters*, and (2) instances where *one and the same letter is divided between two magistrates*.

My scrutiny of Beulé has disclosed the fact that the various series with which we are concerned fall into two, well-marked classes, which we may for convenience call Class A and Class B. In Class A all the "irregularities" are, so to say, regular—that is, they are of one or other of the two kinds indicated above. Occasionally, it should be added, allowance has to be made for the practice that appears to have prevailed of allowing a man to hold office twice within the limits of the same year, a practice which is inconsistent with the accepted view that these subordinate officers were "elected in rotation from each of the twelve tribes as they prytanized in order." In Class B, on the other hand, the irregularities are hopelessly con-

fusing. In the series it includes, my lists are practically a repetition of Beulé's; no attempt to produce order out of chaos gave any promise of success, and for the most part I have accepted his readings as they stood.

CLASS A.

Series xxvii. ΑΜΜΩΝΙΟΣ—ΚΑΛΛΙΑΣ.

ΔΙ	A	ΑΛΚΙΠΠΟΣ	{ H Θ
ΛΥΣΑΝ	B	ΒΥΤΤΑΚΟΣ	{ I K
ΗΡΑΚΛΕ	{ Γ Δ	ΕΥΠΟΛΕ	{ K Λ
ΕΥΒΟΥΛΟΣ	E	ΕΠΙΦΑΝΗΣ	M
ΘΕΜΙΣΤΟ ΑΠΟΛΛΩ }	Z	ΕΥΒΙΟΣ ΠΡΟΜΑ	

Γ for ΗΡΑΚΛΕ is taken from *Num. Chron.*, 1881, p. 87, and Z for ΑΠΟΛΛΩ, from *Cat. Phot. Pacha*, No. 613. Dr. Gaebler has examined for me the Prokesch coin of ΕΠΙΦΑΝΗΣ which has been supposed to read N (Beulé, p. 195); he reports an undoubted M.

Series xxviii. ΑΝΤΙΟΧΟΣ—ΝΙΚΟΓ and —ΚΑΡΑΙΧΟΣ.

ΑΝΤΙΛΟΧ	A	ΕΥΝΟΜ}	
ΝΙΚΩΝ	B?	MENAN }	I
		ΑΓΑΘΑ	K
ΕΙΡΗΝΑ	Δ	ΗΓΕΜΩ	Λ
ΕΥΜΑΧΟΣ }	E	ΑΒΡΩΝ	
ΣΚΥΜΝΟΣ }		ΠΡΩΤΟΓΕ	
ΣΑΡΑΠΙΩΝ	Θ		

Beulé (p. 206) assigns K to ΣΚΥΜΝΟΣ. But he does so only to avoid giving him the E which Combe read on a specimen in the Hunter Cabinet. Combe's reading, which I have verified by personal observation, is confirmed by

Cat. Phot. Pacha, No. 620. The I for MENAN is given by *B. M. C.*, No. 324, and ΑΓΑΘΑ with K by *Num. Chron.*, 1881, p. 87.

Series xxix. ΑΡΙΣΤΟΦ—ΗΡΑ.

ΠΟΛΥ	Α	ΕΠΙΣΤΡ	Λ
ΕΧΕ	Η	ΑΡΧΕ	
ΗΡΑΚΛΩ	Θ	ΜΕΝΕ	
ΒΑΣΙΛΕΙ	Κ	ΦΙΛΩ	

A for ΠΟΛΥ is taken from *Cat. Phot. Pacha*, No. 682.

Series xxx. ΑΦΡΟΔΙΣΙ—ΑΠΟΛΛΗΞΙ.

ΜΗΤΡΟΔΩΡΟΣ	Α	ΕΥΜΑΡΕΙ	Κ
ΔΗΜΟΣΘ	Β	ΗΓΕΜΑ	Λ
ΜΕΙΔΩΝ	Γ	ΒΑΚΧΙ	Μ
ΚΑΛΛΙΑ	Δ	ΔΕΙΝΟ	
ΗΡΑΚΛΕΙ	Η	ΑΡΙΣΤΑΡ	
ΣΙΜΙ	Θ		

As there was some uncertainty regarding the Prokesch coins of ΗΡΑΚΛΕΙ and ΒΑΚΧΙ, I consulted Prof. Dressel, whose readings I have followed. (See Beulé, p. 230.)

Series xxxi. ΑΦΡΟΔΙΣ—ΔΙΟΓΕ.

ΕΠΙΝΙ	Α	ΣΩΚΡΑΤΗΣ	Ι
ΕΥΜΑΡΕΙ	Β	ΔΙΟ	Κ
ΘΡΑΣΥ	{ B. Γ	ΣΑΤΥ	Λ
ΦΙΛΟΞ	Δ	ΦΑΙΝΟΣ	{ M N
ΕΛΙΞ	Ε	ΕΠΙΜΕ	!
ΑΘΗ	Η	ΖΩΠΥ	

It will be seen that I have here omitted the name of ΊΑΝΘΙΠΠΟΣ, which is given by Beulé (p. 233). The

sole authority for it is IA , which we are told was legible on a drachm in the Vienna Collection. Dr. Kubitschek has made fruitless search for this piece in the Imperial Museum, and an examination of the old manuscript catalogue has convinced him that it never was there at all; Beulé's reference must be faulty. Wherever the drachm may be, I have no doubt that the true reading is ΣA , an abbreviation of ΣATY —a magistrate unknown to Beulé, but found in Sir Edward Bunbury's list, accompanied by the letter Λ , (*Num. Chron.*, 1881, p. 87). Beulé assigned Λ to ΕΠΙΜΕ , citing in support of this a tetradrachm in the Prokesch Collection. Prof. Dressel informs me that this latter coin is not in Berlin. I have, therefore, been unable to get the reading authenticated. It is possible that Λ may be correct: that is, my theory would not be vitiated if it were; but it is more than likely that there has been a misreading. Δ , for instance, would be readily explicable, as ΕΛΙΞ may not have held office till the sixth prytany. The doubtful N for $\Phi\text{AI}\text{N}\text{O}\Sigma$ requires a word of explanation. Beulé (p. 233) finds an H on the amphora of a Paris tetradrachm with $\Phi\text{AI}\text{N}\text{N}\text{O}\Sigma$. MM. Babelon and Dieudonné, while admitting that there is room for uncertainty, would decidedly prefer to read N . I may add that the principle of re-election would not account for H here, as we have already twelve magistrates without reckoning $\Phi\text{AI}\text{N}\text{O}\Sigma$ twice over.

Series xxxii. $\text{ΑΧΑΙ}\text{O}\Sigma\text{—ΗΛΙ}$.

ΕΥΔΗΜΟΣ	Γ	ΠΥΘΟΚΛΗΣ	Ι
ΙΠΠΟΝΙΚΟΣ	Δ	ΑΠΟΛΛΟΔ	Κ
ΚΛΕΑΡΧ	{ Ε	ΜΗΤΡΟΔ	{ Λ
	{ Ζ		{ Μ
ΗΡΑΚΛΕ }	Θ	ΣΩΣΙΒΙΟΣ	Μ
ΕΡΜΟΚΡ }		ΝΙΚΑΝΩΡ	

Beulé (p. 235) assigns **A** to **ΝΙΚΑΝΩΡ** on the strength of a tetradrachm in Berlin; he admits that he is doubtful as to the letter, and Prof. Dressel pronounces it quite illegible. Regarding the Prokesch coin with **ΕΥΔΗΜΟΣ**, the same numismatist reports that the letter on the amphora is in all probability **Γ** and not **Η** (see Beulé, p. 235). **Z** for **ΚΛΕΑΡΧ** is taken from *Cat. Phot. Pacha*, No. 635. Beulé (*loc. cit.*), founding upon a Prokesch coin, assigned **Z** to **ΗΡΑΚΛΕ**, supposing **Θ** (at St. Petersburg) to be "*une erreur du graveur.*" Prof. Dressel has examined the Prokesch piece, and writes that the letter is very indistinct. He thinks that he can make out "*traces of B*"—the italics are his own. I should suggest **H** or **Θ** as more probable. The doubtful **M** for **ΜΗΤΡΟΔ** is supplied by *B. M. C.*, No. 351. Mr. Hill tells me that **K** is also possible, and the latter letter would, of course, be equally in place if the theory I am maintaining is correct.

Series xxxiii. **ΔΑΜΩΝ—ΣΩΣΙΚΡΑΤΗΣ.**

ΚΡΙΤΩΝ	$\begin{Bmatrix} \text{A} \\ \text{B} \\ \text{Γ} \end{Bmatrix}$	ΚΛΕΙΔΑΜΟ	$\begin{Bmatrix} \text{I} \\ [\text{K}] \\ \text{Λ} \end{Bmatrix}$
ΝΙΚΟΝΟ	Δ	ΑΠΟΛΛΩΝΙ	$\begin{Bmatrix} \text{Λ} \\ \text{M} \end{Bmatrix}$
ΙΑΣΩΝ	Ε	ΤΙΜΩΝ	Μ
ΘΕΟΔΩΡ	$\begin{Bmatrix} \text{Ε} \\ \text{Z} \end{Bmatrix}$	ΕΡ	
ΑΡΙΣΤΩΝ	$\begin{Bmatrix} \text{I} \\ \text{H} \end{Bmatrix}$		

Beulé's arrangement (pp. 243, 244) has in the case of this series required a good deal of readjustment. The Prokesch coin with "**ΜΙΚΙΟ**" or "**ΟΙΚΝΟ**," really reads **ΝΙΚΟΝΟ**, with a clear **Δ** (Gaebler). Similarly, on

the actual specimen where Beulé finds **ΘΕΟΔΩ** and a doubtful **Δ**, Prof. Dressel reports **ΘΕΟΔΩΡ** and a distinct **Ζ**. Again, Combe's reading of **Μ** on the Hunter coin with **ΑΠΟΛΛΩΝΙ** is undoubtedly correct, and Beulé's emendation correspondingly unjustified. **Μ**, on the Berlin specimen with **ΤΙΜΩΝ**, is certain (Dressel).

ΚΡΙΤΩΝ and **ΚΛΕΙΔΑΜΟ** apparently each held office for two successive prytanies. I do not know of any specimen giving **Κ** to **ΚΛΕΙΔΑΜΟ**, but that letter is unappropriated by any one else, and we may conjecturally assign it to him until evidence to the contrary is produced.

Series xxxiv. **ΔΙΟΓΕ—ΠΟΣΕΙ.**

ΕΣΤΙΑΙΟΣ	Α	ΔΩΡΟ	Ι
ΔΗΜΗ	Β	ΕΡΜΟΚΡΑ	Θ
ΔΙΟ	Γ	ΚΑΛΛΙΦΩΝ	Μ
ΗΓΕΜΑ	{ Ε	ΘΕΟΔΩ	
	Ι		

Beulé (p. 254) cites two coins in the Prokesch collection with the name of **ΗΓΕΜΑ**, one having **Κ** on the amphora, the other **Ε**. Dr. Gaebler informs me that there is only a single specimen now in Berlin, and that on that **Ε** is practically certain. Even if the reading **Κ** were correct, a simple explanation would be possible. For we saw in connexion with the last series that re-election was occasionally practised, and no other claimant for **Κ** has yet appeared. **ΗΓΕΜΑ** also provides Beulé with another opportunity for emending Combe; but, as a matter of fact, **Ι** is certain on the Hunter coin. The letter **Θ** for **ΕΡΜΟΚΡΑ** is supplied by *Cat. Phot. Pacha*, No. 652.

Series xxxv. ΔΙΟΝΥΣΙ—ΔΙΟΝΥΣΙ.

ΑΝΤΙΦΑ	Α	ΜΗΤΡΟ	Η
ΑΡΙΣ	Β	ΑΡΙΣΤΩ	{ Η
ΑΡΙΣΤΑΙ	Γ	ΤΙΜΩ	{ Θ
ΔΗΜΟΣ	Δ	ΑΙΣΧΙ	Ι
ΚΑΛΛΙΣ	Ε	ΜΝΗΣΑΡ	Κ
ΖΕΥΞΙ	Ζ	ΑΣΚΛΑ	Λ
			Μ

Here Η for ΑΡΙΣ[ΤΩ] comes from *Cat. Phot. Pacha*, No. 655. In the same collection, No. 654 is said to read ΑΙΣΧΙ with Θ. This, however, would appear to be impossible. It could not be accounted for by re-election, for we have already got a magistrate's name for each of the twelve prytanies, and if any one shared Θ with ΑΡΙΣΤΩ, it would naturally be ΤΙΜΩ. I have no doubt that either the magistrate's name or the letter has been misread.

Series xxxvi. ΔΙΟΤΙΜΟΣ—ΜΑΓΑΣ.

ΝΙΚΟΔΗΜΟΣ	Α	ΚΑΛΛΙΑΔΗΣ	}	Θ
ΧΑΡΙΝΑΥΤΗΣ	Β	ΔΙΟΝΥΣΙΟΣ ΚΕ		
ΕΧΕΣΘΕΝΗΣ	{ Δ	ΛΑΜΙΟΣ		Ι?
	{ Ε	ΘΟΙΝΟΣ		Κ
ΝΙΚΩΝ	{ Ε	ΗΡΑΚΛΕΟΔ		Λ
	{ Ζ			
ΑΠΟΔΔΩΝΙΔΗΣ	Η	ΜΥΣΚΕ		

Beulé (p. 268) gives Ζ to ΕΧΕΣΘΕΝΗΣ. In support of this he cites two coins, one in the British Museum, which, as a matter of fact, has Δ (*B. M. C.*, No. 384), and another in the Prokesch collection, which really has a tolerably clear Ε (*Dressel*); the Fox coin, the amphora of which Beulé (*l.c.*) leaves blank, has a distinct Δ

(Dressel). Z for ΝΙΚΩΝ is the reading of Haym, unnecessarily emended by Beulé. Prof. Dressel reports that I for ΛΑΜΙΟΣ seems fairly certain, although the letter is not complete on either of the specimens now in Berlin. The κ for ΘΟΙΝΟΣ comes from *B. M. C.*, No. 386, and the Θ for ΔΙΟΝΥΣΙΟΣ ΚΕ from *Cat. Phot. Pacha*, No. 657. For ΜΥΣΚΕ, see *Num. Chron.*, 1881, p. 88.

Series xxxvii. ΔΩΡΟΘΕ—ΔΙΟΦ.

ΔΙΟΚΛΕ	{ A B	ΔΙΟΚ	{ K Λ
ΔΗΜΗΟΥΛΙ	Δ	ΑΝΤΙΛΟΧ	{ M A?
ΝΙΚΟΔΩ ΑΙΣΧΙΝΗΣ }	Η	ΧΑΡΜΙ	

Η for ΑΙΣΧΙΝΗΣ is given by *Catalogue Thomas*, p. 205. It is rejected by Beulé, on no other ground than that "the Η belongs to Nikodoros." The doubtful A for ΑΝΤΙΛΟΧ comes from *Cat. Phot. Pacha*, No. 660. It may, of course, be really Λ, but A would also be possible, as we shall see.

Series xxxviii. ΕΠΙΓΕΝΗΣ—ΣΩΣΑΝΔΡΟΣ.

ΚΑΛΛΙΚΡΑΤΗΣ	A	ΜΗΤΡΟΔΙ	Η
ΜΟΣΧΙΩΝ	B	ΑΝΤΙΓΟΝ	{ H Θ
ΕΥΜΗΛΟΣ	Γ	ΒΟΥΛΑΡ	I
ΔΕΙΝΟΚ	Δ	ΠΥΘΟΝΙ	K
ΗΛΙΟΔΩ	E	ΛΕΟΝΤΟΜΕ	Λ
ΣΩΣΑΡΧ	[Z]	ΠΑΜΦΙ	M

There is no explicit authority for giving Z to ΣΩΣΑΡΧ, but all the other letters are appropriated, and he is the only one of the twelve magistrates whose order in the series is

unsettled. Beulé (p. 284) assigns M to ΜΗΤΡΟΔΙ, on the strength of a coin in Vienna. Dr. Kubitschek informs me that the piece in question has a distinct H. From the same numismatist I learn that the Vienna tetradrachm with the name of ΑΝΤΙΓΟΝ has undoubtedly Θ, not H. *Cat. Phot. Pacha*, No. 665, gives Β for ΒΟΥΛΑΡ. As, however, the rest of the description shows that the coin is not in good condition, we may fairly assume a misreading: the letter is probably either Θ or Κ. The M for ΠΑΜΦΙ is given by *B. M. C.*, No. 401. This last-named magistrate drove Beulé to despair; on six examples with his name he found four distinct amphora letters (p. 284). It is almost incredible that in a puzzling case of this kind Beulé should not have verified his references. If he had turned to Combe's *Description*, from which are cited all of the examples that disturbed him so seriously, he would have found that not one of them bore the name either of ΠΑΜΦΙ or of ΕΠΙΓΕΝΗΣ or of ΣΩΣΑΝΔΡΟΣ. They all belong to the ΞΕΝΟΚΛΗΣ-ΑΡΜΟΞΕΝΟΣ series. There is no confusion save in Beulé's own notes.

Series xxxix. ΕΥΒΟΥΛΙΔΗΣ—ΑΓΑΘΟΚΛΗΣ.

ΘΕΟΔΩ } ΦΙΛΟ }	A	ΛΥΣΙΠ
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Series xl. ΕΥΡΥΚΛΕΙ—ΑΡΙΑΡΑ.

ΔΙΟΚΛ	A	ΞΕΝΟΚΡΑ	K
ΣΩΚΡΑΤΗΣ } ΑΝΔΡ }	B	ΑΡΧΙΠ	M
		ΚΑΛΛΙ	N
ΙΠΠΟΝΙ	Δ	ΑΛΕΞΑΝ	
ΗΡΑΚΛΕΙ	{ H? Θ	ΔΙΟΝΥ	
ΦΑΝΟΚΡΙ	I	ΣΑΤΥ	

The B for ANΔP rests on the authority of Sestini, rejected on *a priori* grounds by Beulé (p. 297). Δ for ΙΠΠΟΝΙ is certain on the Prokesch coin (Gaebler). Beulé (*l.c.*) gives Δ to ΗΡΑΚΛΕΙ, referring to two coins, one in Berlin, the other in the British Museum. Prof. Dressel writes that on the former of these the letter is almost entirely obliterated. On the London specimen, Mr. Head, in *B. M. C., Attica*, No. 410, read Δ, following Beulé. He has, however, been kind enough to re-examine the coin with Mr. Wroth, the conclusion being that the letter (which is much blurred) "is probably Η." There can be no doubt that Θ belongs to ΗΡΑΚΛΕΙ. Prof. Dressel reports that it is very distinct on a tetradrachm in the Berlin Museum, and I have noted the following published specimens: Leake, *Num. Hellen.*, p. 24; Bunbury, *Num. Chron.* 1881, p. 87; and *Cat. Phot. Pacha*, No. 676. Beulé (p. 297) actually quotes the Leake coin under Θ, giving the reference correctly, but leaving the name of the third magistrate blank. He adds, with what I fear we must call characteristic inaccuracy: "*M. Leake ne donne que les deux premiers noms.*" Details of the piece with the name of ΚΑΛΛΙ and the letter Ν have already been given. ΣΑΤΥ was unknown to Beulé, but will be found *B. M. C.*, No. 412.

Series xli. ΖΩΙΛΟΣ—ΕΥΑΝΔΡΟΣ.

ΚΛΕΟΜΕΝ	Β	ΖΩΙΛΟΣ	}	Θ
ΣΩΚΡΑΤ	Γ	ΠΟΛΥΚΡΑ		Ι
ΛΥΣΙΠΠ		ΘΕΟΞΕΝ?		
ΜΕΝΩΝ	Δ	ΚΡΙΤΩΝ		Κ
ΑΝΤΙΣΘΕΝΗΣ	Ζ			
ΑΣΚΛΗΠ	{ Ζ?	ΚΡΙΤΩΝ		Μ
	{ Η	ΔΕΙΝΙ		

Beulé (p. 300) assigns **I** to **ΛΥΣΙΠΠ**. He admits, however, that the letter on the Paris specimen, which is his sole authority, is rubbed, and that Mionnet read it **P**. I have no doubt that the true reading is **Γ**, which is given in *Cat. Phot. Pacha*, No. 680. Gesner described and figured a coin of **ΑΣΚΛΗΠ** with **Σ**. Beulé (p. 299) emended this to **H**, to agree with a specimen in his own collection. It seems much more likely that the letter misread by Gesner was really some form of **Z**. The **Θ** for **ΖΩΙΛΟΣ** is supplied by Sir E. Bunbury (*Num. Chron.*, 1881, p. 87). **ΘΕΟΞΕΝ** appeared in *Cat. Wellenheim* with **Π**, an utterly improbable letter (Beulé, p. 300), which I have felt justified in omitting. *Cat. Phot. Pacha*, No. 679, gives **ΘΕΟΓΕΝ** (not **ΘΕΟΞΕΝ**) with **I**. The **K** for **ΚΡΙΤΩΝ** is, I learn, highly probable, but not absolutely certain, on the Berlin and Vienna specimens. Dr. Joergensen reads an **M** on the Copenhagen coin of this magistrate. Assuming both readings to be correct, we may suppose that **ΚΡΙΤΩΝ** held office in the tenth (or eleventh) prytany, as well as in the twelfth.

Series xlii. **ΘΕΜΙΣΤΟ—ΘΕΟΠΟΜΠΟΣ.**

ΦΙΛΩΝΙ	A	ΛΥΣΑΝΙ	H
ΑΠΟΛΛΟΦΑΝΗΣ	B	ΑΡΙΣΤΟ	{ I K
MENOI	Γ	ΔΙΟΝΥΣΙ	
ΘΕΟΔΩΡ	E	ΔΗΜΗΤΡ	
ΘΕΟΓΕ	Σ?		

The doubtful **Σ** for **ΘΕΟΓΕ** comes from *B. M. C.*, No. 418, while *B. M. C.* 419, confirms **I** for **ΑΡΙΣΤΟ**, which was doubted by Beulé (p. 305).

Series xliii. ΘΕΟΦΡΑ—ΣΩΤΑ.

ΗΡΑΚΛΩΝ	Α	ΝΙΚΟΚ	Μ
ΦΙΛΗ	Β	ΦΑΛΛΙ?	
ΕΥΚΛΗΣ	Γ	ΛΑΜ	
ΠΟΛΥΚΛ	Ι	ΠΕΙΣΩΝ	
ΑΜΦΙΚΡ	Κ		

The name ΠΕΙΣΩΝ comes from *B. M. C.*, No. 427.

Series xliv. ΚΑΡΑΙΧ—ΕΡΓΟΚΛΕ.

ΤΙΜΟ	Α	ΧΑΙ	{ Η Θ Ι
ΘΕΜΙ	Β		
ΜΕΝΑ	Γ	ΔΙΟΦ	Ι
ΕΥΔΗ	Δ	ΦΕΙΔΙ	Κ
ΚΛΕΟΜ	Ε	ΔΙΟΝΥ	Λ
ΑΠΟΛ	Ζ	ΔΙΟΜΕ	Μ

The Γ which one might have anticipated for ΜΕΝΑ, is actually given by *Cat. Phot. Pacha*, No. 697. ΧΑΙ held office for two successive prytanies.

Series xlv. ΛΥΣΑΝ—ΓΛΑΥΚΟΣ.

ΙΕΡΩ	Α	ΦΙΛΟΚΡΑ	Θ
ΝΙΚΩΝ	Β	ΑΘΗΝΟΒΙ	Ι
		ΝΙΚΟΔΩ	Κ
ΚΛΕΟΦΑΝ	Δ	ΝΙΚΑΝΩΡ	Λ
ΜΕΝΕ	Ε	ΑΘΗΝΟΔΩ	
ΑΘΗΝΟΒΙ	Ζ		
ΔΑΜΩΝ	Η		

Here ΑΘΗΝΟΒΙ appears twice over, having apparently been re-elected for the ninth prytany after holding office during the sixth. The authorities for the occurrence of his name in connexion with the letter Ι are Sir E. Bun-

bury in *Num. Chron.*, 1881, p. 87, and *Cat. Phot. Pacha*, No. 701.

Series xlv. ΜΕΝΕΔ—ΕΠΙΓΕΝΟ.

ΘΕΟΦΡ	Α	ΛΥΣΑΝ	Ι
ΦΙΛΟΘ	{ Β Γ	ΑΛΕΞΑ	Κ
ΟΦΕΛΟ	Δ	ΑΡΙΣΤ	Ν
ΣΩΦ	Ι	ΔΙΟΔΟ	
ΕΠΙΓΟ }		ΕΥΡΥΚ	
ΝΙΚΟΓΕΝ	{ Η Θ		

The name of ΣΩΦ, with the corresponding Ι, is taken from *Cat. Phot. Pacha*, No. 709.

Series xlvii. ΜΗΤΡΟΔΩΡΟΣ—ΜΙΛΤΙΑΔΗΣ or —ΔΗΜΟΣΘΕΝΗΣ.

ΑΝΤΙΦΑΝΗΣ	Α	ΚΑΛΛΙΣ	{ Η Θ
ΕΡΜΟΓΕ	Β	ΕΥΚΡΑ	Ι
ΠΥΡΡΟΣ	Γ	ΘΕΟΦΙ	Κ
ΑΡΧΙΑΣ	Ε	ΣΜΙΚΥ	Μ
ΑΡΙΣΤΟΔΗ	Ζ	ΚΑΛΛΙΦ	
ΕΥΚΛΗΣ	Η		

Η for ΚΑΛΛΙΣ is the reading of Ramus, unnecessarily corrected by Beulé (p. 339). The Ι for ΕΥΚΡΑ is from *Cat. Phot. Pacha*, No. 713.

Series xlviii. ΜΙΚΙΩΝ—ΕΥΡΥΚΛΕΙ.

ΑΡΙΣΤΟ	Α	ΠΑΡΑ	Ζ
ΑΣΚΛΗ	Β	ΕΥΑΝ	Η
ΔΙΟΚΛΗΣ	Γ?	ΔΗΜΟ	Θ
ΒΟΥΚΑΤΤΗΣ	Δ	ΓΟΡΓΙΠ	Ι
ΣΩΚΡΑΤΗΣ	Ε	ΑΡΕΣΤΟΣ	Κ

The Γ for ΔΙΟΚΛΗΣ rests on the authority of *Cat. Phot. Pacha*, No. 723, where, however, the description is not clear. An examination of the original has verified Beulé's conjecture (p. 341) regarding the true reading of the Hunter coin with ΓΟΡΓΙΠ.

Series xlix. ΠΟΛΕΜΩΝ—ΑΛΚΕΤΗΣ.

ΘΕΟΔΟΤΟΣ	Α	ΑΡΙΣ	Θ
ΠΑΤΡΩΟΣ	Β	ΕΥΔΙ	Ι
ΔΗΜΗ	Γ	ΔΩΡΟ	Κ
ΔΙΟΝΥΣΟΔ	Δ	ΤΙΜΩ	Ν
ΛΥΚΙ	Ξ	ΑΠΟΛΛΟΔΩ	
ΤΙΜΩ	Η		

A for ΘΕΟΔΟΤΟΣ will be found in *Num. Chron.* 1881, p. 87. The Paris coin with ΤΙΜΩ has a certain Ν (Dieudonné). This magistrate must, therefore, have held office twice in the course of the year. It is possible that some of the coins bearing his name and reported to read Η, may really read Μ. *Cat. Phot. Pacha*, No. 737, gives "Δ (?)" to ΑΡΙΣ. I have not included this doubtful reading in the list, although there would be no difficulty in accepting it; Ε is still unappropriated, and ΑΡΙΣ may have held office in the fifth as well as in the eighth prytany. I should add that Beulé (p. 360) is justified in altering Cernbe's Ι for ΛΥΚΙ into Ξ.

Series I. ΠΟΛΥΧΑΡΜ—ΝΙΚΟΓ.

ΠΡΟΤΙΜ	Α	ΔΙΟΝΥΣΙΟΣ	Ε
ΔΗΜΟΣΘΕ	Β	ΘΕΜΙΣΤΟΚΛΗ	Ξ
ΦΙΛΟΔ	Γ	ΚΑΡΑΙΧΟΥ	Κ
ΑΠΟΛΛΩΝΙΔ	Δ		

For ΦΙΛΟΔ and ΚΑΡΑΙΧΟΥ see *Num. Chron.*, 1881, p. 87.

Series li. ΣΩΚΡΑΤΗΣ—ΔΙΟΝΥΣΟΔΩ.

ΑΠΟΛΛΟΦΑ	Α	ΑΣΚΛΑΠΩΝ	Θ
ΖΩΙΛΟΣ	Β	ΑΡΤΕΜ	Κ
ΑΧΑΙΟΣ	Γ	ΕΡΜΟΚ	Μ
ΑΡΙΣΤΟΣ	Δ	ΑΠΟΛΛΩΝΙ	
ΖΩΙΛΟΣ	Ε	ΠΡΩΤΟΜ	
ΑΘΗΝΙ	{ Ε [Ζ] Η		

Here we seem to have two instances of re-election. M. Dieudonné informs me that Β for ΖΩΙΛΟΣ is certain on one of the Paris specimens and highly probable on the other, while Dr. Gaebler writes that Ε is beyond a doubt on the Prokesh coin of the same magistrate (see Beulé, p. 364). Again, ΑΘΗΝΙ has Ε in *Num. Chron.*, 1881, p. 87. Assuming that he has also Η as stated by Beulé (p. 365), we must suppose that he held office during the sixth as well as during the seventh prytany; the still unappropriated Ζ therefore naturally falls to him.

Series lii. ΤΙΜΑΡΧΟΥ—ΝΙΚΑΓΟ.

ΜΝΑΣΙΚ	Β	ΑΡΧΕΣ	Η
ΑΜΦΙΚΡΑΤΗ	Γ	ΜΕΝΑΝΔΡΟΣ	Θ
ΣΩΣΙΓΕ	Δ	ΚΛΕΩΝ	Ι
ΔΩΡΟΘΕ	Ε	ΦΑΝΟΚΛΕ	Λ
ΛΥΣΙΑ	Ι	ΑΝΤΙΟΧΟΣ	

The name of ΚΛΕΩΝ and the corresponding letter are derived from *Cat. Phot. Pacha*, No. 753.

Series lxi. ΕΥΜΑΡΕΙΔΗΣ—ΑΛΚΙΔΑΜ or
—ΚΛΕΟΜΕΝ.

ΘΟΙ	A	ΛΕΩΝ	{ Θ I
ΔΙΟΝ	B	ΑΡΙΣ	K
MENE	Δ	ΛΕΩ?	Λ
ΔΗΜΟ	{ Δ E	ΠΥΡΡΙ	M
ΑΣΚ	Z		
ΜΗΤΡΟ	H		

Beulé (p. 291) corrects a reading of the *Catalogue Wel-
lenheim* which assigned Δ to ΔΗΜΟ. Dr. Gaebler,
however, reports that the true reading of the Prokesch
tetradrachm with "ΑΜΜΩ" (see Beulé, p. 292) is
ΔΗΜΟ, and that there is a Δ on the amphora. This is
further confirmed by "Λ (?) " which is assigned to
ΔΗΜΟ in *Cat. Phot. Pacha*, No. 673.

Series lxvi. ΚΟΙΝΤΟΣ—ΚΛΕΑΣ.

ΣΩΣΤΡΑ	A	ΔΙΟΝΥΣΙ	Γ
ΠΛΕΙΣΤΙ	B		

Series lxx. ΤΙΜΟΣΤΡΑΤΟΣ—ΠΟΣΗΣ.

ΔΙΟΝ	B	ΔΑΜ	Θ
ΕΡΜ	Γ	ΑΙΣ	I
ΜΗΤ	Δ	ΕΚ	K
ΛΑΧ	E	ΑΠΟΛ	{ M N
ΝΑΥ	Z	ΑΡΙΣ	
ΛΕΥ	H		

To the particulars given above regarding the Berlin
tetradrachm of this series with N on the amphora, I may
now add a reference to *Cat. Phot. Pacha*, No. 755.

Series lxxi. ΦΑΝΟΚΛΗΣ—ΑΠΟΛΛΩΝΙΟΣ.

ΤΙΜΟΚΡΑΤΗΣ	Α	ΘΕΟΔΩΡΟΣ	Η
ΑΡΙΣΤΟΔΗΜΟΣ	Β	ΕΙΒ	Θ
ΣΩΣΤΡΑΤΟΣ	Δ	ΦΙΛΙΝΟΣ	Ι
ΒΑΚΧΙΟΣ	{ Δ Ε	ΑΣΚΛΑΠΩΝ	Κ
ΑΛΕΞΑΝ	Ζ	ΣΤΡΑΤΙΟΣ	{ Κ Λ

Δ for ΒΑΚΧΙΟΣ is quite certain on the Hunter coin, Combe's reading being correct as against Beulé's emendation (p. 375). I am indebted to Dr. Gaebler for a careful examination of the Prokesch tetradrachm with ΑΛΕΞΑΝ. The letter on the amphora is, he informs me, neither Ε nor Σ (see Beulé, p. 375), but Ζ. Combe read Β for ΦΙΛΙΝΟΣ on a Hunter coin; as Beulé surmised, however, the letter is really Ι. That ΣΤΡΑΤΙΟΣ had Κ as well as Λ is proved by *B. M. C.*, Nos. 508 and 509. The Prokesch coin with his name, as to the reading of which there was some difference of opinion (Beulé, pp. 375 f.), has certainly Λ (Gaebler).

Series lxxii. ΧΑΡΙΝΑΥΤΗΣ—ΑΡΙΣΤΕΑΣ.

ΝΙΚΑ	Α	ΔΙΟΝΥ	Θ
ΔΙΟΝΥΣΟΔΩ	Β	ΕΠΙΓΟ	Ι
ΕΥΔΗΜΟΣ	Γ	ΑΝΑΚΙΣΚΟ?	{ Κ Λ?
ΙΑΣΩ	Δ	ΘΕΟΞ	Λ
ΗΡΑΚΛΕΙ	Ε	ΚΗΦΙΣΟ	{ Μ? Α
ΕΠΙΤΙ	{ Ζ Η?	ΑΠΟΛΛΟΔΩ	

This list differs in several important respects from that found in Beulé (pp. 380 f.). To begin with, to ΝΙΚΑ,

who here appears with A, Beulé assigned Λ on the strength of two pieces in the Prokesch collection and one in the cabinet of General Fox. Professor Dressel, however, informs me that of the two Prokesch coins, one has a certain and the other a probable A; the Fox coin is not in Berlin. *Cat. Phot. Pacha*, No. 756, also gives A. The reading given of a London specimen in the *B. M. C.* (No. 515), is Λ; but Mr. Hill writes to me that the letter is rubbed and "may be A just as well as Λ." Again, Beulé gives Θ to ΙΑΣΩ, with the remark: "*Berlin: M. de Prokesch possède un tétradrachme avec A ΣΩ. L' A est-il un Λ? Est-ce une erreur?*" Professor Dressel reports that on one of the two coins here mentioned, Δ is beyond a doubt, while on the other it is highly probable. I have therefore allotted to ΙΑΣΩ the letter given by Beulé to ΕΠΙΚΡ[ΑΤΗΣ], and the latter name I have omitted altogether. It professes to rest on the authority of a piece in the British Museum. There is no such coin there now. Besides, without ΕΠΙΚΡΑΤΗΣ we have already a magistrato for each of the twelve prytanies, so that his appearance in Beulé's list is in all probability due to a confusion or a misreading. Under ΕΠΙΚΡ[ΑΤΗΣ] Beulé mentions another London coin with "ΕΠ." This is perhaps identical with *B. M. C.*, No. 513, which Mr. Head in the catalogue reads as ΕΠΙ with I on the amphora. There is, of course, no reason why it should not be so, as ΕΠΙ may stand for ΕΠΙΓΟ. It may, however, equally well stand for ΕΠΙΤΙ, and I am strongly inclined to think that it does, for Mr. Hill writes to me that a careful re-examination of the coin has led him to conclude that the amphora letter was originally H. A fresh feature in my list is ΔΙΟΝΥ with Θ, which is taken from a tetradrachm now in the British Museum,

purchased at the Bunbury Sale (Lot 1,024). Whether ΔIONY of the eighth prytany is identical with ΔIONY-ΣΟΔΩ of the second, is an open question. It will further be noted that I have removed ΚΗΦΙΣΟ[ΔΩΡΟΣ] from the beginning of the year to the end. From what M. Dieudonné tells me, there appears to be no doubt that the Paris specimen with his name has Α on the amphora. There are, however, two specimens in Berlin. On the one of those which is cited by Beulé the letter is illegible; the other—from the Prokesch collection—has either Μ or Ν, most probably the former (Dressel). It remains to add a word regarding *Cat. Phot. Pacha*, No. 757. The reading there given is "[ΕΥ]ΠΙ ou [ΕΥ]ΠΥ" with Α on the amphora. There is no room for this additional magistrate. Possibly the true reading may be [ΑΝΔ]ΠΙ, i.e. the ΑΝΑΚΙΣΚΟ [ΑΝΔΡΙΣΚΟ ?] of Beulé, for whom Α would, of course, be quite appropriate.

CLASS B.

Series liii. ΑΜΦΙΚΡΑΤΗΣ—ΕΠΙΣΤΡΑΤΟΣ.

ΑΡΙΣ	A	ΛΥΣ	Z
ΑΡΙΣΤΕ	{ B Γ Λ Μ	ΕΥΔΗ	{ H Θ
		ΕΥΜΑ	Θ
ΗΡΟΔΩ			

Series liv. ΑΝΔΡΕΑΣ—ΧΑΡΙΝΑΥΤΗΣ.

ΚΡΙΤ	{ A B		
ΑΜΥΝΟ	{ Δ Ε Ζ	ΔΗΜΗΤΡ	{ H Κ Λ Μ

Series Iv. ΑΠΕΛΛΙΚΩΝ—ΓΟΡΓΙΑΣ.

ΔΙΟΓΕ	{ A B	ΔΕΙΝΙΑΣ	{ Δ Ε Η
ΑΡΙΣΤΟΝΟΥΣ	{ Γ I?	ΣΙΜΩΝ	I
ΔΙΟΝΥΣΙΟ	Δ	ΑΡΓΕΙΟΣ	Λ
ΗΡΑΚΛΕΙ		ΧΑΡΕΙΣΙΟΣ	Μ

ΔΙΟΝΥΣΙΟ and not ΔΙΟΣΙΟ (Beulé, p. 212) is the name of the magistrate who has Δ. The doubtful I for ΑΡΙΣΤΟΝΟΥΣ comes from *Cat. Phot. Pacha*, No. 622.

Series Ivi. ΑΡΙΣΤΙΩΝ—ΦΙΛΩΝ.

ΔΡΟΜΟ	{ A B	ΗΓΙΑΣ	{ I H M Θ I K Λ M
ΘΕΟ	{ E Z	ΗΓΕΑΣ	

Series Ivii. ΑΡΟΠΟΣ—ΜΝΑΣΑΓΟ.

ΑΠΟΛ	{ A B Γ Δ Z Λ Z	ΦΙΛΙ	{ Z H
		ΔΗΜΕ	Θ
ΠΡΑ		ΝΙΚΟΣ	I

Series Iviii. ΔΗΜΕΑΣ—ΕΡΜΟΚΛΗΣ.

ΚΛΕΙΔΑ	A	ΑΠΟΛΛΩΝΙ	{ E K
ΧΑΡΙΑΣ	B	ΣΩΣΙΚΡΑΤ	{ E Z
ΠΛΕΙΣΤΙ	{ B Γ	ΕΥΠΕΙΘ	I
ΛΥΣΙΜΑ	{ Δ I?	ΔΙΟΓΕ	

The name ΧΑΡΙΑΣ is supplied by *Cat. Phot. Pacha*, No. 642. The doubtful Ι for ΛΥΣΙΜΑ comes from *B. M. C.*, No. 360, and the Κ for ΑΠΟΛΛΩΝΙ from *B. M. C.*, No. 361.

Series lix. ΔΗΜΗΤΡΙΟΣ—ΑΓΑΘΙΠΠΟΣ.

ΑΠ	$\left\{ \begin{array}{c} \text{Α} \\ \text{Γ} \\ \text{Δ} \\ \text{Ε} \\ \text{Ζ} \\ \text{Η} \end{array} \right.$	ΦΙ or ΦΛΙ	$\left\{ \begin{array}{c} \text{Β} \\ \text{Ε} \\ \text{Ι} \end{array} \right.$
		[Π]ΟΥ	Ε?

For [Π]ΟΥ see *Num. Chron.*, 1881, p. 88.

Series lx. ΔΩΣΙΘΕΟΣ—ΧΑΡΙΑΣ.

ΔΙΟΝ	$\left\{ \begin{array}{c} \text{Α} \\ \text{Β} \\ \text{Δ} \\ \text{Ε} \\ \text{Η} \\ \text{Θ} \end{array} \right.$	ΧΑΙΡ	$\left\{ \begin{array}{c} \text{Κ} \\ \text{Λ} \\ \text{Μ} \end{array} \right.$
		ΣΑΜ	Λ
		ΣΩΣΙ	Μ
ΑΡΙ	Ι	ΜΗΚΙ	Γ

Series lxii. ΕΥΜΗΛΟΣ—ΚΑΛΛΙΦΩΝ.

ΜΑ	Α	ΔΙΟΚ	$\left\{ \begin{array}{c} \text{Δ} \\ \text{Ε} \end{array} \right.$
ΑΛΕΞ	$\left\{ \begin{array}{c} \text{Α} \\ \text{Β} \\ \text{Γ} \end{array} \right.$	ΗΡΑ	$\left\{ \begin{array}{c} \text{Ε} \\ \text{Η} \\ \text{Θ} \\ \text{Ι} \\ \text{Κ} \\ \text{Λ} \\ \text{Μ} \end{array} \right.$

Here Α for ΑΛΕΞ is taken from *Cat. Phot. Pacha*, No. 674.

Series lxiii. ΗΡΑΚΛΕΙΔΗΣ—ΕΥΚΛΗΣ.

ΔΗΜΑ ?	A	ΜΟΣΧΙΩΝ	Z
ΑΣΚΛΗΠΙ	{ B Γ	ΣΩΣΙΚΡ	{ Z H
ΔΙΟΝΥΣΟΓ	{ B Γ	ΔΗΜΟΣΘ	K
ΑΡΙΣΤΑΙ	Δ	ΒΑΚΧΙ	{ I K Λ
ΧΑΡΜΙΔ	{ Δ Ε	ΔΙΟΚ	{ Λ M
ΑΡΙΣΤΩΝ	E		{ N

The Λ on the coin read as [HP]AK in *Cat. Phot. Pacha*, No. 687, proves, I think, that the true reading is [B]AK. With reference to what has been said above regarding the coins with ΔΙΟΚ and N, I may add that *Cat. Phot. Pacha*, No. 685, doubtless also reads N and not H.

Series lxiv. ΘΕΟΔΟΤΟΣ—ΚΛΕΟΦΑΝΗΣ.

ΔΗΜΟΣ	{ A B	ΠΟΠΛΙ	{ H Θ I
ΣΩΤΑΣ	{ B Γ Δ	ΔΙΟΝΥ	{ K Λ
ΔΩΡΟΘ	Δ	ΠΛΑΤΩΝ	Λ
ΕΠΙΜΑΧΟΣ	E	ΜΟ	
ΛΥΣΙΠΠ	Z		

Cat. Phot. Pacha, No. 690, gives "IB" for ΠΟΠΛΙ. Possibly this series belongs to Class A.

Series lxv. ΙΚΕΣΙΟΣ—ΑΣΚΛΗΠΙΑΔΗΣ.

ΧΡΥΣ ?	A		{ Z H
ΤΕΙΣ	{ B Γ Ε	ΘΕΟ	{ Θ K M

Series lxviii. ΝΙΚΗΤΗΣ—ΔΙΟΝΥΣΙΟΣ.

ΔΗΜΟ	{ Α Β Γ	ΞΕΝ	{ Η Θ
ΔΡΟΜΟ	Γ	ΕΜΒΙ	{ Θ Μ
ΚΛΕΙ	Δ	ΓΛΑΥ	
ΚΙ	Ε		

This is another series which may belong to Class A.

Series lxix. ΝΙΚΟΓΕΝΗΣ—ΚΑΛΛΙΜΑΧΟΣ.

ΑΠ	{ Α Γ Ε	ΑΝΔΡΕΑΣ	{ Λ Μ
ΝΙΚΗΤΗΣ	Ι	ΑΡΙΑΡΑΘΗΣ	
ΚΑΛΛΙΘΕΟΣ	Λ		

The preceding lists will inevitably require to be corrected and supplemented in the light of coins of which I have at present no knowledge. But it may fairly be claimed that, as they stand, they provide us with the means of reaching some interesting results. To begin with, the theory that the amphora letters represent the calendar months no longer depends for its proof on the existence of N coins. In the various series included in Class A, its application has cleared up in the most natural manner the difficulties admitted by Beulé; more than that, its aid has made it possible over and over again to correct Beulé's statement of facts, these corrections having been verified by independent observers in every instance where the piece concerned could be traced. It would not be easy to devise a more severe test. What holds good for

* See *Cat. Phot. Pacha*, No. 783.

Class A must hold good for Class B, and indeed for all coins of the New Style. The confusion that prevails in Class B admits, as we shall see, of a rational explanation, while it is in the highest degree improbable that the significance of the amphora letters would ever be deliberately altered. We may take it, then, that these letters everywhere represent the calendar months, a fact of which specialists in *Zeitrechnung* may be expected to make some use. But this is not all. The lists, as I have given them, confirm in a striking way the soundness of Mr. Head's stylistic arrangement, and may perhaps be made to throw a little additional light on the question of chronology. All of the twenty-six series that fall within Head's Period III, will be found together in Class A. Of the series belonging to Period IV, only those which bear a third magistrate's name are available as evidence. They are divided; at least five are sufficiently regular to justify their inclusion in Class A; in the majority of the remainder, which form Class B, confusion reigns supreme. It is only natural to infer that in the course of Period IV, the custom of appointing a fresh third magistrate in every prytany fell into disuse, and that the earliest series within that period are those which belong to Class A.⁶ Incidentally it becomes clear that Mr. Head

⁶ I have compared this result with the dates arrived at for these series on entirely different grounds. Mr. Head assigns Series lxvi. to about 146 B.C. (*B. M. C., Attica*, p. xlviii.). According to Kirchner (*Zeits. für Num.*, xxi, pp. 92 f.), Series lxii. and Series lxviii., the latter of which I have described as possibly belonging to Class A, are to be dated "soon after 146 B.C." The same scholar (*Ibid.*, p. 91 f.) places Series lxi. about 130 B.C.; its exceptionally good style suggests an even earlier date. E. Preuner, however (*Rhein. Museum*, 1894, pp. 362 ff.), would place Series lxx. as late as 110 B.C., while the

is right (*B. M. C.*, p. xlii.) in refusing to accept the hypothesis that would recognise in APIAPA of Series xl. Ariarathes, son of Mithradates, who was King of Cappadocia in B.C. 99—90.

It may at first sight appear surprising that the lists in Class A should present such a varying proportion of "irregularities," and that the prytanies and the months should ever have got so seriously out of joint as they have done in the case, say, of Series xxvii. As a matter of fact, these phenomena furnish additional proof of the truth of the main thesis. During a considerable part of the second century B.C., the epoch to which Class A undoubtedly belongs, a double system of time reckoning was in vogue at Athens. The inscriptions on which our knowledge of that system rests, have been fully discussed by G. F. Unger (*Die Attischen Doppeldata*, in *Hermes* xiv., pp. 593 ff; *Zeitrechnung der Griechen und Römer*, in Iwan Müller's *Handbuch*, p. 756, 2nd ed., 1892). Briefly put, the facts are as follows. About the year 170 B.C. the custom was introduced of dating the same event in official records in two distinct ways. One of the dates was of the ordinary kind, mentioning the particular day of the calendar month. The other mentioned a particular day of a month which, while bearing one of the usual names, was distinguished by the epithet *κατὰ θεόν*. The names of the two months might be the same. Where they differed, the month *κατὰ θεόν* was the one that preceded or the one that followed the calendar month in regular succession. Further—and this is noteworthy—where the

amphora letters would indicate that it is a good deal earlier. These indications, of course, are not infallible, any more than is the method followed by Preuner.

day of the prytany was added, it agreed with the day of the month *κατὰ θεόν*. The practice of double dating continued down to about 128 B.C. There can be little doubt that the *θεός* in question is Helios, and that Unger is right in inferring that a systematic attempt was made to introduce a "solar" calendar at Athens, an attempt that perhaps ultimately failed owing to the manner in which from time immemorial important religious festivals had been associated with certain definite days in the lunar months. Popular prejudice and ecclesiastical conservatism may well have combined to defeat the new movement, in spite of the support of the civil authorities. That it had that support is shown not merely by the use of the new method side by side with the old one in official documents, but by the fact that the year *κατὰ θεόν* was also the official year, as is plain from the agreement between its dates and the dates of the prytanies.⁷ The precise amount of difference between the two systems of reckoning varies greatly. In *C. I. A.* ii. 471, it is *nil*; in *C. I. A.* ii. 433, it amounts to twenty-five days. This variation is readily accounted for by Unger's hypothesis. The year *κατὰ θεόν* began with the summer solstice, the old-

⁷ There is evidence to show that the official year differed from the calendar year long before 170 B.C. In the Aristotelian *Ἀθηναίων Πολιτεία*, xxxii, 1, we are told, in connexion with the revolution of 411 B.C., that, but for the overthrow of the constitution, the new βουλή would have assumed office on the 14th of Skirophorion. It has been generally assumed that this gives us the fixed date for the opening of the official year (Busolt: *Griech. Staatsalterthümer*, p. 249, 2nd ed.; Oehler in Pauly-Wissowa, *Real-Encyclop.* III, 1,024). If that had been so, the author of the *Ἀθ. Πολ.* would not have mentioned such an obvious fact in his historical *résumé*; its proper place would have been in xliii., the more strictly constitutional part of his work. See also B. Keil in *Hermes* xxix., pp. 82 ff.

fashioned year began with a new moon. These two events might coincide. But, as a rule, the first day of the lunar Hekatombaion would fall either before or after the summer solstice. Unger tells us that between 337 and 262 B.C. the "lunar" New Year's Day at Athens fell on various dates between June 22nd and July 28th of our reckoning; and this by no means exhausts the possibilities.

I have thought it worth while to restate Unger's conclusions at some length, because (if I am right) we have in the coins of the New Style, as now interpreted, the most extensive, though not, of course, the most detailed, series of documents in which the double dates can be recognised. The third magistrate's name gives the prytany, and therefore the month *κατὰ θεόν*; the amphora letter gives the month according to the ordinary calendar. Wherever we find in Class A extensive "irregularities" of the normal type, we may regard it as certain that the coins belong to a year in which the summer solstice and the first day of (lunar) Hekatombaion fell far apart. The same may be said even more positively of those cases where we find Hekatombaion (A) or Skirophorion (M) divided between two magistrates (Series xxxii., xxxiii., xxxix.), or where we find one magistrate striking coins in both (Series lxxii. and xxxvii.). The importance of the N pieces as marking intercalary years hardly requires to be pointed out.

How far does the numismatic evidence enable us to supplement the deductions drawn by Unger from the inscriptions? It appears to me to provide at least one new fact. Unger fixes the date of the introduction of the double system in 170 B.C. The grounds on which he does so are not absolutely convincing. One of the double-dated inscriptions belongs to the time of Eumenes II of Pergamus (197-159 B.C.), and there are also extant two

inscriptions with single dates in which allusion is made to that king; the inference is that in all probability the innovation took place within the limits of his reign. So far we may agree. But the ingenious arguments by which Unger (*Hermes* xiv., pp. 605 f.) fixes *C. I. A.* ii. 435 down to 171 B.C., and thus makes 170 B.C. the highest upward limit for the double dates, do not amount to positive proof. And it is here that the coins help us. Series xxviii. gives us the name of **ANTIOXOS**, who has been conclusively shown to be identical with Antiochus IV of Syria. The date of his magistracy in Athens was, of course, prior to his accession in 175 B.C. Now, during the year in which his name appears upon the coins we find two third magistrates in Maimakterion and two in Elaphebolion, an amount of "irregularity" that affords strong *prima facie* evidence of the existence of the double system at least five or six years earlier than is allowed by Unger. If we accept Kirchner's date⁸ (180 B.C.) for Series xlvi., the commencement must be pushed a year or two further back still.

The great majority of the series in Class A, including the earliest that can be dated, belong to the time of the double reckoning. The introduction of that reckoning must, in any event, have nearly coincided with the beginning of the practice of placing a third magistrate's name upon the coins. Would it be too bold to suggest that the two were simultaneous, and that the latter was one of the devices adopted to familiarise the Athenian public with the innovation of a "solar" calendar? The parallel with the double dates in the inscriptions is cer-

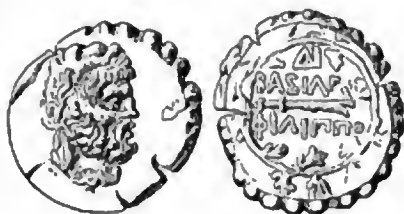
⁸ *Zur Datirung der Athenischen Silbermünzen*, in *Zeitsch. für Num.*, Bd. xxi. pp. 82, 84 ff.

tainly remarkable. Again, the view I have put forward is thoroughly consistent with our knowledge of what subsequently happened to the third magistrate. Unger shows pretty conclusively that the double calendar was abandoned about 128 B.C. Of the series belonging to Period IV, the opening of which Head places approximately in 146 B.C., only a few fall into our Class A—that is, into the period where the double reckoning can be unmistakably recognised. Of the remainder, the majority omit the third magistrate's name altogether. The balance go to form Class B, where there seems to have been no limit to the number of times that the third magistrate might be re-elected, and where it was apparently possible for two third magistrates to exercise jurisdiction at one and the same time. This is precisely what we should expect to find after the third magistrate's name had come to be of no importance as an indication of date.

GEORGE MACDONALD.

XIII.

NUMMI SERRATI AND ASTRAL COIN TYPES.



Nummus Serratus of Philip V of Macedon.

COINS with serrated edges—Greek, Roman, and Carthaginian—have, for a long time past, exercised the ingenuity of numismatists, various suggestions having been propounded in explanation of their curious fabric.

The theory according to which the serrated border is the ancient counterpart of the modern milled edge, which serves as a protection against clipping, has long been rejected as futile, since this nefarious practice could hardly have compensated for the trouble and risk incurred, when applied to copper coins. Further, the irregular manner in which the serrating, especially in the case of denarii, has often been carried out, would offer no very effectual protection against such mutilation.

Nor is there better warrant for the supposition, likewise discarded, that the process was meant to prevent the

manufacture of plated coins, for plated specimens with the serrated edge are not unknown. Besides, the supposition is rendered nugatory by the existence of such coins, of Syria and Macedonia, in that comparatively valueless metal, copper, which often served for the core of plated pieces.

M. Babelon has in recent times offered a new explanation.¹ He suggests that the *dentated* edge might have been introduced in allusion to names like *Denter* or *Dentatus*. There is certainly nothing intrinsically impossible in such a suggestion, put forward tentatively only by the author, for the Roman republican coinage is well known to abound in cognate *plays* on names of mint magistrates. Still, certain obvious difficulties remain, such as the absence of names on the earliest Roman *serratus*; the subsequent abundance of examples, none of which, however, bear names that seem to allude to this peculiarity of fabric; finally, the production of similar coins by the mints of Carthage, Syria, and Macedonia, all of them presumably older than the earliest Roman.

It might, then, appear advisable to seek the *raison d'être* of the unusual fabric of the flan, *in that fabric itself*, rather than interpret it as bearing on the coin device.

This, M. Svoronos may, in a sense, be said to have done in his papers "*sur la signification des Types Monétaires des Anciens*,"² and "*Sternbilder als Münztypen*."³

These articles contain, I think, ideas worthy of serious consideration, more especially in regard to certain coin-types of Mallus.

¹ *Rois de Syrie, &c.*, p. clxxxix.

² *Bulletin de Correspondance Hellénique*, 1894, p. 101-128.

³ *Zeitschrift für Numismatik*, xvi., p. 219-282.

There are, of course, types from other parts of the Greek world expressive of a cosmic cult, thus possessing, as the learned writer puts it, "*une signification astronomique.*" The dogstar on coins of Ceos, the *ἥψος ἀστήρ* of the Locrians, and the types of Uranopolis are obvious instances. Nor do I doubt it in respect of coins of Miletus⁴ (although I cannot recognise a *constellation* in the type), which bear on one side the head of the sun-god, and on the other a lion with head reverted towards an astral body (the sun). I also share the author's opinion—though from different reasons—concerning the circle of marginal rays on the reverses of incuse pieces from Magna Graecia. I even advance beyond him in ascribing a cosmic meaning to the cable border commonly found on the obverse side of these quaint coins, and I will presently offer some remarks on the subject. But first I would refer to one or two types of Magna Graecia and Sicily, which invite conjecture in this direction.

There is in the collection of the British Museum a tetradrachm of Rhegium with Aristaeus seated, and the lion's head on the reverse. Over the eyebrows of the beast there appear two small annulets enclosing, each, three dots. M. Six recognised in these objects "*symboles solaires, comme l'est le lion lui-même.*"⁵

I venture to interpret them, similarly, as heavenly bodies, viz., the constellation of Canis Major at the season of its heliacal (*i.e.*, the lion's head) rising and setting—east and west being suggested by the two annulets—or the dog days. Three major stars near Sirius, in the shape of an almost perfectly equilateral triangle, mark this con-

⁴ *Sur la signification, &c.*, p. 105, fig. 11.

⁵ *Num. Chron.*, 1873, p. 382.

stellation, and reason having been shown that the seated figure on the other side of the coin may be interpreted as Aristaeus,⁶ Sirius is as much in its place as part of the coin type here, as on the pieces of Ceos.

Three small dots placed above a lion's head in profile on a coin of Leontini,⁷ I feel tempted to interpret likewise as this, or some other, constellation at the season of its heliacal setting or rising.

These *astronomical* devices will serve my purpose, viz., to show that, while I agree with the author in a measure, I also differ. For, unless I have misunderstood him, he would in the case of these coins look on the type of the lion's head as a constellation, viz., Leo. At least, such is his argument in connexion with several of the types he introduces, for he says: "Si, par exemple, on voit sur les monnaies de Karthaia de Kéos une grappe de raisin; sur celles de Paros une chèvre; sur les monnaies de Milet et d'Amorgos un lion; sur les monnaies d'Apulie un cheval, &c., constamment accompagnés d'une étoile, on doit, selon nous, penser aux constellations du Raisin, de la Chèvre, du Lion, du Cheval, et ainsi de suite."⁸

Of the four or five coins mentioned, I consider, as I have said, the type of Miletus as astral (solar); not, indeed, because there appears a star-shaped figure beside the lion, but because a link of *action*, the looking-round, connects the two. In regard to the other types I entertain doubts as to the soundness of the author's theory, which would turn them all into mere picturo puzzles. A bare juxtaposition of the parts of a design, when meant to

⁶ *Num. Chron.*, 1897, p. 173—189.

⁷ *Brit. Mus. Cat., Sicily*, p. 89, No. 27.

⁸ *Sur la signification, &c.*, pp. 105 and 106.

constitute an integral type, is not often to be met with on Greek coins.

It can, on the contrary, be shown that even when star-shaped figures on coins refer to individual astral bodies—stars that, according to a dim, but very ancient superstition, were perhaps thought to influence the destinies of the State and its citizens in some special way—even then there need be no connexion between the adjunct star and the main device. I have in my collection an unpublished variety of the well-known Locrian stater; unpublished, on account of the national badge, the ἡῶος ἀστήρ, which appears in the field of the coin in front of Ajax. Here, then, we are on perfectly firm ground. We know the figure is the national *heros*, and the star designates a real star in the heavens. Both appear side by side; yet, so far as I can see, wholly unconnected with one another.

The designers of types, when meaning to express what the author calls *une signification astronomique*, took care to make such a meaning sufficiently clear. Either they created, as I have just said, some element of action between main type and attribute^{9, 10}, or they gave to the whole type a stellar character by encircling it with rays, or, finally, they depicted cosmic bodies and configurations

⁹ Action or motion, as expressed by the volute, is thus the binding element in the rare type of Dicaea that I had ventured to interpret on another occasion. *Vide Num. Chron.*, 1897, p. 22.

¹⁰ On coins of the earlier periods this element of action appears to have been sometimes suggested in a primitive manner, viz., by close contact; as, for example, on early electrum tritai, &c., of Miletus, where the radiate disc directly touches the lion's head; or like the circlets on the Rhegian coin.

as they were, or appeared to be. Such is the case with the βούτελος and the *grapes* or *birds* on coins of Mallus.

Instead of venturing, then, with the author on what appears a theory beset with difficulties, I adhere to the ordinary view, viz: that the grapes and star of the Carthæan bronze piece are attributive to the local cult of Aristæus;¹¹ that the star beside the goat on the bronze coin of Paros is possibly a sign of monetary value, but more probably the mark or signet of a mint magistrate, since it alternates with other signs (an ear of corn, for instance); and, lastly, that the star above the horse on the didrachm of Arpi is also most likely such a mark, perhaps the signet of the chief magistrate of the town, Dazius Altinius, whose name appears on this limited issue, and who twice betrayed Arpi.¹²

I again quote the writer textually: "Il y a, d'abord, des types monétaires sur la signification astronomique desquels il ne peut exister aucun doute. Ce sont les *étoiles* qu'on trouve sur les monnaies de presque toutes les parties du monde entier. Ceux qui ne veulent voir dans ces figures que de simples ornements décoratifs méconnaissent le caractère religieux des types monétaires de l'antiquité."

The author here seems to contend that *une signification astronomique* is, *ipso jure*, inherent in *stars* on ancient coins.

¹¹ Compare the heads on coins of Ceos, *Brit. Mus. Cat., Aegean Islands*, Pl. XXI., 1—5, 22—25, where Aristæus appears in his threefold nature, viz., Zeus, Apollo (with rays, but bearded), and Dionysos. On the obverse of the coin with grapes and star he is *another* Dionysos. The star is, of course, Sirius.

¹² Livy, xxiv., 45.

Now, in a sense and as a mere matter of shape, stellated configurations may always be said to be stars in so far as they contain *the suggestion of stars*, even though they be merely parts of the pattern of a tessellated pavement or of a piece of lacework. But being *intended* for ornament only, I presume it to be granted by the author that such have no *astronomic significance*?

Further, he will allow, I presume, that no *astronomic significance* attaches to globules or pellets which have been placed on coins in order to mark their value? Now, if we turn to the British Museum Catalogue, *Italy*, we meet, under No. 6 on page 81, with a bronze coin furnished on both sides with two stars. In the same manner, the next coin is provided with one star on both sides. No *astronomic* meaning will be claimed for the types of either coin. Both are found with pellets in the place of stars,¹³ proving the latter to have been substituted for the former. That is, the stars are here signs of value, pure and simple, on a—nominal—sextans and uncia. They were put on both sides for decorative effect, as becomes more apparent from the next coin but one, No. 9. Here the two marks of value (stars) have evidently been placed above the team of Selene (although they appear already on the other side) for the purpose of forming a background for the type. This is confirmed by a variety of the type,¹⁴ where Zeus guides the horses, and pellets take the place of the stars. Stars do occur, then, on ancient coins both for ornamental purposes and as mere marks of value, without an ulterior *astronomic* meaning.

Further—star-shaped figures have undoubtedly been

¹³ Carelli, Pl. LXX., Nos. 11 and 12.

¹⁴ *Op. cit.*, Pl. LXX., No. 9.

used very freely *for the better ordering of the mints*, viz., as mint-marks or magistrates' signets. When so used, they were likewise devoid of the *intended* astronomic meaning, serving, mainly, to distinguish different issues, and the star beside the goat on the above-mentioned bronze coin of Paros, or that in front of the Sphinx on the Chian piece, are cases in point, since the stars alternate with other adjuncts.¹⁵

Owing to such considerations I cannot agree with the author concerning the man-headed bull which he proposes to connect with the constellation *Taurus*, on the ground that a star appears sometimes on, above, or near it. I am content to adhere to the usual interpretation, recognising in all such figures the divinity of the river or stream of the respective neighbourhood. For confirmation let us turn to the types of Neapolis, where the monster—as is the case at Aluntium also—is sometimes shown emitting water from its mouth,¹⁶ and sometimes as a youth with bull's horns, his name—ΣΠΕΙΘΟΣ—being expressly added. The same applies to ΓΕΛΑΣ, and other rivers. Here, therefore, there cannot be the slightest doubt, the legends themselves determinating the types. Eridanos as well as the tauriform Dionysos must, then, be set aside.

Perhaps the author did not *mean* to say all he has said in the last-quoted passage. In the one quoted before he appears to claim an *astronomic significance* particularly for types that are *constantly* found accompanied by a star. In that case he has failed to observe that several of his

¹⁵ See *Brit. Mus. Cat.*, ear of corn, grapes, club, prow.

¹⁶ Riccio, *Monete di Città Antiche*, Pl. I., No. 7. Also *Note*, p. 5, No. 80 *ibidem*.

types are *not* constantly accompanied by it, as I have already pointed out in several instances. He endeavours to make a special point in favour of his theory, when he refers to the star on the body of the half-bull on comparatively early bronze coins of Neapolis. I have in my collection a fine specimen without this star, nor is there any reason to suppose that mine is the only extant example on which the star does not appear. Certainly, the star on the later coins with the whole figure of bull-shaped Sepeithos (which he likewise instances and depicts, in support of his view) is "conspicuous by its absence," rather than its rare presence.

I said before that I favour a cosmic theory in regard to the origin of the circle of rays which borders the reverses of most incuse coins of Magna Græcia. A fuller discussion of the subject I must reserve for a future occasion. But I will briefly state some reasons for my belief.

It has been recognised long ago that the incuse coinage of the Achaean cities of Southern Italy was of a federal character, and it is argued that it was originated by the most powerful member of that league, Croton, through the instrumentality of the dominant political party, which was strongly influenced, if not actually governed, by Pythagoras.¹⁷ The central divinity in the doctrines of that politico-religious confraternity was Phœbus Apollo, the giver of light to body and to mind. In the latter aspect, as the seer, he is typified on the coins of the city by the tripod, the archetype of which marked the centre, the omphalos, of the earth at Delphi. As the giver of physical light he encircles all things terrestrial, as indicated by the

¹⁷ Lenormant's theory (*La Grande Grèce*), accepted by Head (*Historia Numorum, Croton*).

endless chain which is composed of connected tiny curves, each provided with a globule, and each typifying a solar rotation, according to the ancient idea, around our globe. The ornament appears to be a very old one, going far back into the art of the East, the home of a more ancient solar worship. The incuse border of the reverse completes the scheme of the design by adding the solar rays. A like fabric being used for the coins of all the leagued cities, this border, which forms such a characteristic feature of the fabric, was adopted by all, although it does not retain the original connexion with the types of the coins.

Cosmic motion is similarly typified by the circle with a central globule that crowns the guiding staff of Urania on the famous tetradrachm of Uranopolis.¹⁸ In this instance one curve, which naturally becomes a circle, serves the purpose. When applied to the whole coin-disc, continuity of motion is expressed by a succession of curves. Compare with it the movement of the sea as depicted on coins like No. 14, Pl. III, of *Horsemen of Tarentum*. If these curves were enclosed between two plain border lines, like those on Fig. 1, Pl. I. of the same monograph, and pellets added between the curves, the border would, as nearly as possible, resemble that of the incuse coins. There are variations of the design, the pellets sometimes forming, as tiny thickenings, part of the curves.

Being strikingly effective as a decorative feature, the cable border was sometimes reverted to when incuse coins were no longer struck, as is shown, for instance, by coin No. 4, Pl. I., of the *Horsemen of Tarentum*.

¹⁸ *Zeitsch. f. Num.*, v., Pl. I. 2.

The results of my enquiry, then, are briefly these :

I recognise, tentatively, certain marginal designs on incuse coins of Magna Graecia as intended to express cosmic motion and solar rays. On a few coins of somewhat later date there occur three pellets, sometimes enclosed in a circle (Rhegium), and sometimes not (Leontini), which seem to suggest to me, mainly from the nature of the main type and their connexion with it, a certain constellation.

Coin-types of Greek-Asiatic cities supply us either with figures impersonating heavenly bodies and characterised as such by the disc which they hold (Mallus), or from which they rise (Issus and Mallus),¹⁹ or with a βαίτυλος (not unfrequently met with on coins of other cities) supposed, perhaps, to have dropped—διοπετής—from the constellation figured beside it as clusters of grapes, or as suggesting the shapes of birds.²⁰ We also meet, of course, with types that impersonate the sun, especially in Asia, by the lion either with a starry disc

¹⁹ *Zeitsch. f. Num.*, iv., 145. Also *Revue Num.*, 1898, Pl. V., Nos. 14 and 20 (coll. Waddington).

²⁰ According to M. Six's theory (*Num. Chron.*, 1894, p. 326), the βαίτυλος symbolizes Apollo; the birds stand in a suggestive relation to the golden eagles on the Delphic omphalos, well known from a Cyzicene stater; the grapes express the fertility of the region; and the signs ∇Γ are not constellations, but letters. I have no decided opinion as to the attribution of the sacred stone, and I do not object to M. Six's view concerning the letters. The grapes might, *by themselves*, be taken for what they are, or appear to be. But it seems a more difficult matter to account satisfactorily for the *birds*. Their shapes do not truly represent birds, but rather suggest them. Further, they are formed of the same clusters of globules as the grapes. Archaic fabric is out of the question as an explanation, considering the date of the coins. Obviously, then, there exists a close connexion between the *grapes* and *birds*. I think with M. Svoronos that

or without. Our enquiry is, however, concerned with the lesser stars and their constellations; not with the two great luminaries, references to which abound on coins. Then there are a few Cretan types, mostly of later times, that may perhaps lay claim to an astral significance by virtue of the rays which border the coin field. Lastly, there is the series of coins of Ceos with Sirius sending forth his scorching rays, and well-known types of Locroi and Uranopolis. Later pieces, Greek and Roman, with all or single signs of the zodiac, of Ursa Major, &c., that explain themselves, need not be specially mentioned. To this class belong certain Eastern types, *e.g.* of Com-magene of the first centuries before and after Christ (see *Brit. Mus. Cat. Galatia*, &c., pp. XLV. and XLVI.).

Now it might seem strange that the Greeks, who, as early as the times of Homer and Hesiod,²¹ commonly employed allegorical impersonation to denote groups of stars, should have used such types but little on coins. The main reason for this is conveyed by the term just

both represent the same object, or objects, and if so, the *grapes* cannot be grapes. Flanking the symbolical stone, they are not unlikely to share in its symbolical meaning, and I can think of nothing better than M. Svoronos's original and ingenious theory. He may be right also in regard to the signs ∇ Γ , especially if the star-dots, which sometimes are placed below them, really do refer to them; not to the sacred stone. But I prefer to think that they refer to the stone, which they, like the *birds* and *grapes*, flank, and that they represent these. The dot on the stone is perhaps the mark of its astral origin. Here, as in the case of the two annulets on the Rhegian coin, I would venture to suggest that the *two* birds express *rising* and *setting* (*i.e.*, the moments specially marked by the Greeks, as we know from Hesiod).

²¹ In *Ἔργα καὶ Ἡμέραι*, for instance, I count ten references to stars and constellations, omitting numerous ones to sun and moon.

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used, viz. *allegorical impersonation*. By it I mean the pictorial rendering of some object (or some agency, mental or physical) into something animated—not a mere symbolizing of beings or agencies, by objects.

The sense is known and understood, and here is a handy illustration. If we assumed the joined heads on silver coins of Istrus to represent *stars* (see here footnote 25), the *fratres Helenae, lucida sidera*, this we would call allegorical impersonation. But the twin amphorae with stars above them, on a well-known gold stater of Tarentum, are, like the kindred vessels on Lacedaemonian coins,²² symbolical of the great twin brethren. Similar symbols or emblems (the double axe of Tenedos, for example), occur on early coins. Not so allegorical figures, as has been shown elsewhere.²³ Now, these astral figure-pictures did not as such, as far as I am aware, become objects of general worship and veneration²⁴ with the Greeks.²⁵ Their very

²² *Brit. Mus. Cat., Peloponnesus*, Pl. XXIV. 11.

²³ *Num. Chron.*, 1897, p. 174, &c. I have been told that impersonative coin-types did occur much earlier than I contended in my former article, as was shown by heads on coins like those of Terina or Pandosia, with the city name in the nominative case. I take this opportunity to say in reply that the objection is hardly well founded, these early simple types being understood to represent (like those of Segesta and others) the eponymous nymphs of their cities—not abstract impersonations of civic communities.

²⁴ Professor Lewis Campbell, *Religion in Greek Literature*, p. 10 (London, 1898):—"It is strange—if astronomical and practical religion were from the first combined—that it should have been left for Aratus in the Alexandrian time to divulge the fact, in versifying the science of Eudoxus; and that the Lion Gate of Mycenae, if it symbolized the sun in Leo, should have faced north-west."

²⁵ I am mainly adverting to groups of stars or constellations. There was, of course, the cult of the great luminaries, and a few instances of star-worship do occur, such as that of Sirius in Ceos, traditionally instituted by Aristaeus himself, to

attribution often differed, the same constellation being referred now to one god or heros, and again to another and a third. Consequently they remained, on the whole, mere allegorical impersonations, just as much as a mountain or an isthmus depicted in human shape.²⁶

Poetry always dealt largely in allegorical word pictures. But painting and sculpture were slow to follow the sister art, and they did so, mainly, after the zenith of their excellence was passed. Thus, then, we must not expect to meet in the earlier and in the best times, and in regions where Greek art was not affected by Eastern cults, with allegorical figures, human or animal, of constellations.

Their first appearance in a purely Greek spot, the island of Ceos, is probably marked by the rare silver stater, No. 1,375, Pl. VII. from the Photiades Pacha collection, now in the British Museum, with the head of Sirius beside a bee on the reverse.²⁷ It is suggestive of a better type of art that, while the bronze coins, which may be of a somewhat later date, show the creature blazing forth large rays, the silver coin dispenses with these spikes.

assuage its scorching heat; or the veneration of Phosphorus and Hesperus. These stars having become deified, we meet with them on coins (*Hist. Num.*, p. 285; *Doct. Num.*, ii., p. 191). Otherwise adoration seems only to have been given to the spiritual personalities of gods and heroes, not to their fanciful star-pictures; as in the case of the Dioskouroi, who manifestly are called *stars*, not because they were literally thought to be such, but because certain stars were supposed to be their habitation. *They dwell in the glowing aether among the stars* (Eurip. *Electra*, 991).

²⁶ I would draw the reader's attention to the interesting allegorical coin-type of ΕΚΚΑΗ(ΕΙΑ), in Sir Hermann Weber's collection, lately published by Dr. Imhoof-Blumer in the *Journal of Hellenic Studies*, vol. xviii., Pl. XII. 1.

²⁷ *Num. Chron.*, 1891, p. 129.

Of course, I do not infer that pictorial renderings of *all* constellations were wholly unknown to the earlier Greek world. Amulets and charms (and almost any object of jewellery might assume a talismanic character), for example, would then as later be adorned by the toreutic artist with the astral sign that ruled the month in which the wearer was born. But to reason from magic charms in favour of the theory would appear as unsafe, as to deduce from an ancient gem with the figure of a skeleton that the Greeks thus depicted Death. Even public monuments, shrines of Helios or the Horai for example, may have borne the signs of the zodiac at an early age. Such representations would claim the beholder's *practical* interest in the astronomy of the seasons. The personified Sun himself might, possibly at a fairly early period, be adorned with his astral attributes, the signs of the zodiac, like the tall and beautiful torso of the Vatican, with the constellations of the months on the *balteus* (Raoul-Rochotte, *Monumens Inédits*, Pl. XLVI. 3, p. 171, footnote 1). Yet they would stand to the god only in the relation of attributive badges, and would not, by themselves, call forth religious aspirations. Nor do I overlook that, in some few instances, these star-pictures represented objects, not animated beings. But the cause (*viz.*, their fanciful character) underlying the avoidance by the restrained genius of the earlier Greek artists of animated subjects, that form the great majority of this class, would naturally operate in the same negative direction with regard to the comparatively few inanimate astral symbols.

I will now pass on to Carthaginian coins, which take me back to the first subject of the inquiry, *viz.*, serrated coins.

M. Svoronos conjectures²⁸ that serrated coins, Greek, Carthaginian, and Roman, were meant to suggest by their shape, or symbolize, astral bodies. This theory would require the support of strong evidence, and I do not think the author has supplied sufficiently convincing proofs. At most I could say, he *need* not be wrong so far as serrated Carthaginian coins are in question. The attributes to their types are in the main astral (solar and lunar), and we even meet on some Siculo-Punic bronze coins with sun-discs which, in addition to the usual rays, show the features of a face. Possibly, then, the author is right in surmising that the serration was intended as a yet closer approximation to an astral (solar) body.

But when he attributes an astronomic significance to the main types, I entirely dissent. For me the head of the obverse is certainly not *Virgo* in the heavens; but simply a debased copy of the *Maiden* from Syracusan coins. And the horse, or Pegasus, of the reverse is certainly no constellation for me, when I remember that it very commonly appears in conjunction with the palm-tree. Or are we to seek the tree, also, among the stars?

At about the same period, or possibly a little earlier, there took place in Macedonia a limited issue of *serrati* in bronze. Dr. Gaebler has shown that these coins must have been struck in the long reign (B.C. 220-179) of Philip V,²⁹ not under Andriscus (according to Bompais), or after Macedonia had become a Roman province (as Dr. Head supposed, *Hist. Num.*).

Formerly only the *serratus* with the head of Poseidon was known. Dr. Gaebler's paper adds the handsome and

²⁸ *Bulletin de Corr. Hell.*, 1894, p. 122, &c.

²⁹ *Zeitsch. f. Num.*, xx., p. 174 and 175.

hitherto unique piece with the head of Hercules, and the harpa in the oak-wreath. It is the rarest of all bronze *serrati* and of very good style. I now add—as depicted at the head of this article—another specimen from my collection struck from different dies. Like the Berlin coin, it appears to be struck over the *serratus* with the head of Poseidon, and, despite its solid body, it has been slightly cracked in the process of re-striking. This type occurs more commonly without the serrated edge, and on a rather smaller flan.

M. Svoronos does not perhaps directly claim an astro-nomic meaning for the type with the head of Poseidon and a club in an oak-wreath, but he certainly suggests it (*loc. cit.*). Such a claim he seeks to establish by placing the coins, chronologically, on a line with others which to him appear to possess a more certain astronomic significance. But with the altered chronology of the *serrati* the claim must be disallowed—if for no other reasons.

The author is more confident in regard to the astro-nomic character of the Syrian *serrati* which, commencing under Antiochus III, may date as far back as those of Macedonia and Carthage. This confidence I cannot share from obvious reasons, such as the baseness and dimness of their metal, copper, and the inadaptability of several of the reverse types to his theory.

Considering the serration, foremost and mainly, as what it obviously is, viz., as something meant to strike the eye by more effectively setting off the pictures on the coin-disc, we may, perhaps, put it into line with certain ornamental borders of other Syrian coins; for example, the *infula* border, or the laurel border on the tetradrachms of Demetrius I, or the yet more decorative wreath, composed of leaves, flowers, and wheat-ears, which encircles the

reverse type on those of Antiochus VI. Such designs, besides being ornamental, probably had a *raison d'être*, nor would it be difficult to suggest interpretations for each. Some meaning may, of course, underlie the serrated edge also; only, it seems difficult to discover one not liable to be rejected as fanciful. It is, then, with very great diffidence that I venture to put forward a tentative conjecture—for want of something better. If I imagine the jagged edge as bordering the device in the field, instead of being attached to the circumference of the disc, the design would not seem so very unlike the crenellated bastions on certain pieces of Datames of Tarsus.³⁰ All these Syrian *serrati* are rather insignificant pieces, the larger ones having the plain edge. As such, they may have been struck in local mints by towns privileged thus to distinguish their issues from the bronze coins of the royal officinae.

I do not care to speculate on a possible ulterior meaning; indeed I am, on the whole, inclined to think that no special meaning need lie concealed in the serrated edge. Do we endeavour to discover one for the oblong form or the bean-shape of certain early coins, and for the quadrilateral flans of some of the later Bactrian pieces? Or—to come nearer to the *provenance*, in place and time, of the Syrian *serrati*—is there occasion to suspect some special intent in the bevelled edges of bronze coins of Egypt and of some other countries? ³¹

³⁰ *Les Perses Achéménides*, &c., Pl. IV. 15—20.

³¹ Fr. Lenormant (*la Monnaie dans l'antiquité*, i., p. 264) supposes these pieces with bevelled edges to have been cut from sheets of metal (hammered or rolled?) "like our modern coins." In this he seems to have been mistaken, as lumpy formations, bulgings, and other casting marks on the edges of some specimens show.

All these peculiarities of fabric, as likely as not, need conceal no special meaning. They may have been purely technical, or even casual developments in an ancient industry of which we do not know much. Even the serrated edge may be a technical *sport*. A shining coin blank, much cracked under the hammer and accidentally changed into something approximately serrated, may have suggested this style of fabric for decorative effect. Indeed, I believe that the serration of the Roman silver coins can, at any rate, be accounted for on some such supposition, viz., as a technical experiment. The bronze *serrati* probably received their shape in the casting mould, and the same seems to hold good of the Carthaginian silver pieces. A serrated gold coin I have not seen. Both classes are strong, solid coins, possessed of considerable power of resistance. The serration of the denarii was, on the contrary, produced by incision, after the blanks had been cast, as the clean cuts of fine specimens show. Here, therefore, a special purpose is manifest, and I venture to think that it was done to diminish the risk of comparatively thin and weak flans giving way under the impact of the hammer.

Roman denarii must have been struck with great force; probably by a single blow from a very heavy hammer, for double-struck specimens are hardly ever met with.³² The flattening impact on a comparatively thin and brittle metal disc, forcing the silver from the centre against the edge, would exercise a strong and sudden strain, and any portion of the coin blank thinner and weaker than the other parts was obliged to yield and break. In

³² See the process as indicated by the group on the left in the wall painting from the house of the Vettii, *Num. Chron.*, 1896, Pl. VI.

order to give this sudden strain against the circumference room to spend itself harmlessly, the edge was *nicked* all round, thereby giving the force play to act in three directions instead of only one, viz., to the right and left as well as to outward.

But although the desired result must have been obtained, the mint would find the notching process very troublesome and laborious, and the practice, consequently, was not retained. Opinions appear to differ as to its duration. The earliest *serrati*, those with the Dioskouroi, have been placed as early as B.C. 215. M. Babelon, although he had previously assigned them to that time, favours a much later date.³³ Professor Mommsen places them later yet, viz., after B.C. 93.³⁴ As the issue of *serrati* ceases after B.C. 54,³⁵ they would thus cover a period of less than forty years. That the practice never went beyond the experimental stage is shown by the circumstance that only some mint magistrates chose to adopt it.

From a much-quoted passage in the *Germania* of Tacitus it has been conjectured that these coins were struck in the provinces to be used, more especially, in commerce with northern tribes, and serrated denarii are said to be of inferior—provincial—style and work. But Roman republican coins of coarse work appear to preponderate so much over those of a somewhat refined style, that it would seem hazardous to venture on conclusions in this direction. Nor are specimens of comparatively good work altogether wanting among the *serrati*.

I think the remark of Tacitus has no bearing on the

³³ *Monnaies de la République Romaine*, i., p. 72, footnote.

³⁴ *Geschichte des röm. Münzwesens*, p. 472.

³⁵ Babelon, *op. cit.*, *Genus Aquilina*, i., p. 213, 2.

question of the place of mintage, for it was made long after the issue of the *serrati* had ceased.

E. J. SELTMAN.

Sutton, *March*, 1899.

P.S.—I have just read M. Svoronos's extremely interesting paper "der athenische Volkskalender," in the first part of the *Journal International d'Archéologie Numismatique* for 1899, in which the writer answers certain objections raised by Thiele, in his *Antike Himmelsbilder*, to the theory of astronomic coin-types. With this work I am not acquainted; but, judging from textual quotations, the writer's criticism appears to me, in many respects, unsubstantiated and superficial.

M. Svoronos's reply does not, however, materially affect my own view of the matter. For although he states in precise and emphatic terms that he does not claim—not even in a modified sense—an astronomic significance for star-like figures on coins generally, but only for such as are invariably met with, I had already discounted my objections to his theory by the alternative assumption that this was the author's true meaning.

When he states (p. 21), "dass viele Münztypen, und besonders die meisten der archaischen Münzen, Abbildungen von Sternen und Sternbildern sind," I, for one, cannot follow him.

If the rising and descending dolphins beside the bunch of grapes on coins of Keos "den Aufgang und den Untergang des Sternbildes der Traube oder der Plejaden ausdrückten" (p. 77), do the same fish raise the sepia and the amphora on other archaic pieces of the island to the dignity of constellations?

As regards the star on the shoulder of the man-headed bull on bronze coins of Neapolis, I have ascertained that the British Museum, also, possesses a specimen without this sign, and, further, that *none* of the smaller issue of the same type have it. To me the inference is obvious that the sign here expresses value, viz., the bronze unit (a litra? *Hist. Num.*, p. 34).

And in fine, I cannot persuade myself that these so-called "Sternbilder" are, except in very few cases, "Bilder" (*i.e.*, likenesses); but fanciful allegorical inventions devised, simply, for order and guidance. How, for example, the fancy of the wise men of Egypt set to work in mapping out the heavens may be seen from the chart on the tomb of Sety I, as given by Lepsius in *Denkmäler aus Aegypten und Aethiopien*, iii., 137. Nor will I believe that the earlier epochs of Greek art—so temperate and restrained in the choice of their subjects—would readily reproduce them, except, perhaps, in the restricted domain of practically applied astronomy. The frieze of the church of St. Eleutherius would seem to belong to this class. But since it, from reasons of style, can hardly be assigned to a period anterior to the third century before Christ (more probably, I think, to the latter half of it), its existence does not bear on the argument as I understand it.

I am, at all events, confident that the author will not fail to recognise that—no less when we differ than when we agree—this enquiry has been conceived and carried through in a friendly and sympathetic spirit.

E. J. S.

May, 1899.

XIV.



A RARE PENNY OF ÆTHELRED II.

THE extremely interesting and very rare Anglo-Saxon penny of Aethelred II of the Derby mint, of which a figure is given above, belongs to Mr. F. G. Hilton Price, F.S.A. It came some time since into his possession with a large collection of Roman, Anglo-Saxon, and Mediæval antiquities, including numerous Anglo-Saxon coins, all of which had been found in London.

A description of the coin is as follows :—

Obv.—✚ ÆDELRED REX ANGLORVM. The Agnus Dei to r. ; below, on a tablet composed of dots, the letters $\pi : \Gamma :$ (= Agnus).

Rev.—✚ BLÆTMAN : DYREBY (Derby). The Holy Dove, with open wings, flying upwards. \mathcal{R} . 8. Wt. 25 grs.

Though not represented in the National Collection, this type occurs of several mints ; but it is limited to the reign of Aethelred II. Hildebrand¹ mentions five speci-

¹ *Anglo-Sachsiska Mynt*, p. 32.

mens, which are in the Royal Collection at Stockholm. They are of various mints, and the legends on the reverses show the following readings: i., PVLENOÐ HAMTVN (Southampton); ii., . . . IA HAM (Hunia,² or Ludia, Southampton); iii., ÆÐELPIC HERFO (Hereford); iv.,³ EALDRED MÆLMES (Malmesbury); v., ÆLEFOLD ON STÆFORC (Stafford). Hildebrand also refers to a coin of the same type in the Royal Museum at Copenhagen, which was struck at Nottingham, and which bears the moneyer's name Oswald. Another specimen of Stamford is described and figured by K. F. W. Erbstein.⁴ The legend on the reverse of that coin as given in the figure reads ✚ EDELNV STANFORDC (Ethelwine Stamford). Sir John Evans has also given a description of another example of Mr. Hilton Price's coin.⁵ It has the same moneyer's name, it is of the same mint, and to all appearance it is an absolute duplicate. This piece was in a large hoard consisting of nearly 400 Anglo-Saxon, Irish, German, Russian, etc., coins which was found in 1891 at Nesbø, in the parish of Bolse, in Romsdal. The find was described by Herr Gabriel Gustafson, from whose paper Sir John Evans made his notes.

In connexion with these coins we may also mention one other, which is partly allied to them in type. This coin, which is only half a penny, *i.e.*, a penny cut in half, is also in the Stockholm collection, and is figured by

² Hunia was a Barnstaple moneyer, and Ludia an Exeter moneyer. The preference may be given to the former.

³ Sainthill, *Olla Podrida*, vol. i., p. 214, Pl. 21, 20, publishes a variety of this piece, reading on the reverse EALDRED . O . . . ÆLDMES. This coin, which belonged to Sainthill, was slightly broken.

⁴ *Numismatische Bruchstücke*, p. 96, Pl. II., 23.

⁵ *Numismatic Chronicle*, 1893, p. 38.

Hildebrand.⁶ It is of the Stamford mint. It has the same obverse type as the penny belonging to Mr. Hilton Price, but under the Agnus Dei the tablet is inscribed $\pi\epsilon\eta\text{N}$, and on the reverse, instead of the Holy Dove, there is a small cross pattée, and around, the legend . . . $\text{PINE ON ST}\pi$ (Aethelwine on Stamford). This variety is mentioned, as it may help us to fix the date of the issue of the coins in question.

Hitherto, on account of their exceptional character, the coins of the Agnus Dei and Holy Dove type have been considered by some to be of Danish work. Not only in style, but also in general fabric they are certainly very unlike the other issues of Aethelred II. From the fact, however, that the whole of the known specimens bear the names of English towns, all of which were well-known mints of the time, we must conclude that they are of English manufacture, and, in consequence, must belong to the English series. Though the Danes imitated many of Aethelred's coins, this one does not seem to have been copied by them. It is scarcely necessary to mention Erbstein's attribution of these coins to Frankfort. He misreads the inscription on the reverse, and supposes the name of the mint to be that of Frankfort, and so connects the coins with the period of Henry IV—VI, at which time there was close commercial intercourse between that city and England.⁷

The exceptional character of these coins causes them to stand out apart from the general series of the reign of

⁶ *Anglo-Sachsiska Mynt*, Pl. 5, Fig. G., var. a.

⁷ Erbstein (*op. cit.*, p. 97) says he gives this information for the benefit of ardent collectors of mediæval coins, who may not be so well acquainted with the subject as he is.

Æthelred II; and as they are so utterly unlike the other coins in type, there would have been considerable difficulty in assigning them a place in the sequence of the coinage had it not been for the fragment to which we have referred, having the *Agnus Dei* on the obverse and a cross pattée on the reverse. The *Agnus Dei* type does not occur in any other reign, nor is it found elsewhere on Anglo-Saxon coins; and this is the only representation of the Holy Dove in this form. The nearest approach to the latter type is the bird on the coins of Anlaf of Northumbria; but that bird has been identified as a raven; and besides, we cannot establish any connexion between the coinages of Anlaf and Æthelred. We must therefore look elsewhere for the origin of this remarkable type.

All Æthelred's types are of a religious nature. On the obverse is the head or bust of the King, and on the reverse a small or long cross, a cross with the letters C B V X in the angles, or the Hand of Providence. The coin under our notice is still more religious or ecclesiastical in type than the others, as the head of the King is supplanted by the figure of the *Agnus Dei*. It is, therefore, pretty evident that the issue of these coins was associated with some special event of a providential nature connected either with the nation at large, or perhaps more directly with the life of the King himself.

Glancing at the history of this reign, fertile in great events, and more especially with reference to the inner life of the King, I am disposed to associate these coins with one of three or four personal acts of the King.

Æthelred, as we know, was not a man of even habits of life; at one time he was wild and profligate, at another he would have fits of remorse and would submit to many acts of severe penance. In 997 and 998, when

the country had suffered greatly from the ineursions of the Danes, Aethelred rather looked upon these sufferings of the people as a punishment of Providence for his own misdeeds. In consequence, he made acknowledgment of his sins before the whole Witan, and invoked the pardon of Heaven by restoring to Dorchester and Rochester the lands and revenues of which he had robbed those sees. In 1002, when he sanctioned the general massacre of the Danes, known as the massacre of St. Brice, Aethelred at the time considered that he was carrying out the will of Providence, and that it was a special act of grace, as in later times did Charles IX of France, when he ordered the massacre of the Huguenots. These are events to which the types of the *Agnus Dei* and the Holy Dove may well apply; but there is yet one other, which seems still more applicable, and that is Aethelred's restoration to the throne in 1014, after his expulsion by Svend, King of Denmark, in the previous year. It was the hand of man which drove him forth, but it was considered that his return was accomplished by the intervention of Providence.

We have thus several events ranging over a period from 997 to 1014, to any one of which the types of these coins may well apply. As already mentioned, if taken by themselves, these coins are not connected with any other series of this reign, except with the single specimen of the half of the penny, which has the *Agnus Dei* on the obverse and the cross pattée on the reverse. This, therefore, is our connecting link. Now the small cross-pattée reverse type is only found on two other issues of Aethelred's coinage, quite separate from each other. In one instance the obverse type shows the bust of the King small, diademed, and before it a sceptre; and in the other the bust is large, is clad in armour, and wears a

radiate helmet. The first type belongs to the earliest issue of this reign, as it corresponds precisely to the later coins of Eadweard II. The coins of the second type are more nearly allied to those of Cnut, Aethelred's successor, and therefore belong to a late period of his reign. The style of work, too, is very similar to that of the Agnus Dei piece with the cross on the reverse. The cross is large and the letters are of ruder form. There is, therefore, no reason against assigning the Agnus Dei and Holy Dove coins to the end of Aethelred's reign, and in consequence we may associate this type with the last great event of his life, viz., his restoration to the throne. This order of classification agrees with that proposed by Hildebrand, and which was adopted in the Catalogue of Anglo-Saxon coins in the British Museum.

A few peculiarities connected with Mr. Hilton Price's coin may be noticed. The spelling of the mint-name *Dyreby* is unusual, and I have never met with another instance. The usual spelling is *Deoraby*, *Deorby*, *Deorbi*, or *Derbi*, with numerous abbreviations. *Dyre* is, however, synonymous with *Deore*; as about this time we find moneyers' names written *Deorn* or *Dyrn*, *Dioreman* or *Dyremán*, and *Deorthmaer* or *Dyrhtmaer*. Also the omission of the word ON after the moneyers' names is unusual, yet not altogether exceptional. Even the Agnus Dei coins show no rule in this respect. The letters $\pi \text{ L}$, though separated by dots, are undoubtedly the initials of "Agnus," as other pieces read $\pi \text{ L N}$, and the one figured by Erbstein has $\pi \text{ L N V}$. Dr. Gustafson reads the letters on the coin described by him as $\pi \text{ w}$ (M reversed), and Sir John Evans, not having seen the original piece, has turned these into $\pi \text{ w}$.

H. A. GRUEBER.

XV.

BRISTOL TOKENS OF THE SIXTEENTH AND SEVENTEENTH CENTURIES.

(See Plate XVII.)

THE early history, and subsequent development, of the Token Coinage of Bristol, has hitherto never received much attention; yet one might have imagined that the first introduction of a provincial currency—in reality the earliest copper coinage of this country—would have long since created more than ordinary interest amongst collectors, especially since the publication of Mr. Williamson's great work, which has given an impulse to the study of the provincial coinage of the seventeenth century. Though that edition was issued some time after the paper contributed to this Society,¹ in 1884, by Messrs. Keary and Wroth, it is unfortunate that the Bristol series was then so inadequately described by those responsible for the County of Gloucester;² but that omission gives me the opportunity of offering some additional information concerning this interesting subject, illustrated by specimens from my own collection.

¹ *Num. Chron.*, Third Series, vol. iv. p. 281.

² *Williamson's Trade Tokens of the Seventeenth Century*, vol. i., pp. 237—254.

Ruding, in his *Annals of the Coinage*, specially refers,³ under the year 1574, to the excessive circulation of private tokens, issued by the inferior tradesmen of that period, made of lead, tin, latten, and even of leather, which gave much trouble, though he does not name the source of his information. In one of the recently issued volumes of the *Acts of the Privy Council*, however, there are several references to the unofficial coinage of Bristol, and the following extract, dated the 17th November, 1577,⁴ is well worth quoting in extenso:—

“A letter to Mr. Hanham, Recorder of Bristoll, that where their Lordships are geven to understande that ther is a certen smale coyne of copper (whereof they sende him some peeces) latelie stamped at Bristoll, and there not onlie uttered and received from man to man within the Cittie for farthinges, but is also current at that valewe almoste throughte out the Countrye therabout: he is therefore required fourthwith dilligently to examyn by whome the said coyne hath ben stamped, and by what meanes it is become this (sic) current both within and without the said Cittie, and thereof immediatlie faietfullie to cortefie their Lordships without respecte hadd of personnes whosoover, as he will answer for his default therein to the contrarye.”

Unfortunately, the publication of these official documents has thrown no light upon the *date* of the issue of these early Bristol Town pieces, known as the square or diamond-shaped farthings, made in copper. These were struck by authority from Queen Elizabeth after the Privy Council had failed to secure the issue of a small copper currency, so frequently demanded by the people of that reign. Coupled with their rarity—for the farthings are now exceedingly scarce—this historic fact should make

³ Rev. R. Ruding, *Annals of the Coinage*, 1840, p. 346.

⁴ *Acts of the Privy Council*, New Series, vol. x., 1577—8, p. 92. See also p. 75.

the study of these pieces peculiarly interesting. Hitherto, these square farthings have been catalogued as seventeenth-century pieces, it having been conjectured they were mostly issued about 1600, though some were thought to have been circulated prior to that date. But, in the future, they must form a definite classification as of the *sixteenth* century, being distinct from all others, and the only ones issued at so early a period ; for during a recent examination of the Bristol Corporation Audit Books,⁵ extending from the fifteenth to the seventeenth centuries, some interesting entries have come to light, which give us the long-desired information.

The first entry to which I must refer to is that of the 14th January, 1578, and this is of the greatest value, for it notifies the receipt—

“of Mr. Mayor in copper Tokens, the sum of £15 to be delivered to the Commons of this City and to be current for farthing tokens and not current elsewhere but within the liberties of this City, according to a warrant procured by Mr. Smythes and Mr. John Cole from Her Majesty's Privy Council.”

This then, in the twentieth year of Elizabeth's reign, is, so far as I have been able to trace, the earliest reliable entry which definitely records the first *official* issue of the “square” farthing, the earliest Town piece in that age of great commercial progress, and the forerunner of the undated and afterwards the dated “circular” farthing.

And I wish to emphasise this important fact, that the issue actually took place within two months of the date of the letter⁶ from the Privy Council to the Recorder, with

⁵ By my friend, Mr. John Latimer (author of *Annals of Bristol in the Eighteenth and Nineteenth Centuries*), to whom I am indebted for much help.

⁶ 17th November, 1577.

reference to the illegal tokens of which I have already given the text.

It is of special interest to refer to another minute in the same volume, dated 8th December, 1577, recording the despatch of—

“a letter to the Maiour and Aldermen of Bristoll, concerning the Farthinges of Copper, according to a mynut remayning in the Councell Chest,”

or only five weeks prior to the first issue of those pieces. The 15th July, 1578, notifies the receipt—

“of Mr. Mayor of the hands of Edward Evenet, Goldsmith, 6,000 of farthing Tokens, which amounted to 20s. 10d. per thousand, which Tokens I distributed to the inhabitants and received for them £6 5s. -”;

and, again, on the 28th September following, the same high official received—

“of Edward Evenet £8 15s. - in farthing Tokens, which maketh up the sum of £15 for the which Mr. Mayor hath the Council's letter, with the advice of Mr. Robert Smythes and Mr. John Cole for the stamping thereof”:

but to this latter Corporation entry is appended the very significant note, that “the stamp is delivered to Mr. Mayor again,” which appears to indicate that the local Mint Master was, perhaps, not above suspicion.

These remarkable deliveries make a total of 28,000 issued in the first year of their appearance, a goodly number indeed !

There is no record of any having been stamped in 1579, but in 1580 a like quantity of 28,800, in two stampings, was delivered to the Corporation, the entry of the 7th April stating that there was *great want of them in the town*.

A gap of two years then occurs in the Civic accounts,

so possibly the supply lasted until 1583, when yet other consignments amounting to 28,800, at *four* stampings, were received. This appears to have been the full limit allowed in one year, for which a special warrant had to be obtained annually, at a cost of £7.

It is needless to quote further entries as to the supply—the Audit Books contain many others; but it will be interesting to mention that owing to the continued demand for farthings, and doubtless a belief that very handsome profits⁷ could be made, a “loyal citizen,” evidently anxious to “accommodate” his neighbours with small change, appears to have commenced the private issue of similar pieces; for one Christopher Gallway, a butcher, was fined £5 on the 21st March, 1587, for—

“counterfeiting the Copper Tokens in this City to the great hurt and hindrance of the Commons”;

and probably other members of the fraternity attempted the same fraudulent practice, and distributed forged pieces largely, for an entry in April, 1587, indicates that—

“the Aldermen, Mayor, and Common Council according to a proclamation paid to divers persons in the City and Country for divers sorts of Copper Tokens received of them because they were counterfeited by divers persons and therefore were not allowed in this City, £13 2s. 11.”

These extracts, I think, completely upset the theory advanced that the leaden token,⁸ dated 1591, now in the

⁷ An entry in the Corporation Audit Book for 1594 shows us the profit made on these Tokens: it ran as follows:—

“Received brass Tokens £40 out of which I paid for procuring a warrant £7, and for the stamp 3s. 4d., for the making of every £1 = 8s., for the stuff of every £1 = 12d., and for so much allowed for the dealing therewith, 12d. on every £1, so there is gained clear £22 16s. 8d.”

⁸ *Num. Chron.*, vol. iv., p. 281, No. 185.

British Museum (and illustrated in Messrs. Keary and Wroth's paper previously referred to), is an "official" piece. It could not have been a pattern, as has also been conjectured, so doubtless it must be classed amongst the unauthorised pieces which the Privy Council instructed the Mayor and Aldermen to call in on the 12th May, 1594.⁹

Several entries in the Audit Books notify payments for "new making the mould," and this possibly explains why some of the square pieces represent the Arms of Bristol the reverse way, for carelessness may have taken place in cutting fresh dies: or, on the other hand, some of the specimens now in the hands of collectors may be counterfeits, which doubtless were made by inexperienced workmen, and the error may in that way have occurred. But all these, and other varieties, are most interesting.

The issue of these Square Farthings probably continued until the year 1613, when the grant was made to Lord Harrington of the sole privilege for three years, of making farthing tokens, the state papers of May, 1613, giving—

"the reason to prove the necessity for making small copper coins to avoid the great abuse of leaden tokens made by the City of Bristol and others."

It is not surmised that square pieces were ever struck after the circulation of "Harrington's," but I find it stated in the minutes of the mayor and aldermen for the year 1651 that as—

"the making of the Square Farthings having of late been omitted, some Shopkeepers took upon them to make and vend

⁹ Rev. R. Ruding, *Annals of the Coinage*. H. W. Henfrey, *Bristol Mint*, see *Journal of the Bristol Archaeological Association* for 1875, p. 360.

small Farthing Tokens for exchange in their trade, which not being allowed to pass generally was found to be inconvenient and of great prejudice to the poor. By consideration whereof the Mayor and Aldermen have set on foot the making of new brass farthings round and circumscribed Bristol Farthing on the one side, and the Arms of Bristol on the other, which are allowed to pass within the City, all others being suppressed and unlawful, and to the end that none should suffer loss by them, the Mayor and Aldermen have proclaimed their general use in the City and therefore undertake to accept them at the rate of 4 for a penny for any quantity."

This extract seems to fix definitely the year 1651 when the undated circular farthings were issued, those coined the year following being dated.

The same minute, 1651, is of still further importance because of its reference to the issue of farthing tokens by shopkeepers, of which only one specimen was known to Mr. Williamson as late as 1889; but I have been fortunate in discovering two fresh types somewhat recently, and Messrs. Spink have notified another.

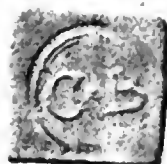
It is hardly likely that many private tokens became current, for when the first circular farthings were issued by the City of Bristol, all others were "suppressed and unlawful."

LIST OF TOKENS OR TOWN PIECES.

Sixteenth Century.

1. A small CIRCULAR PIECE, stamped out of thin brass. It bears the arms of the City of Bristol—a ship issuing from a castle—within a beaded circle. The ship to *left*, and the letter B (for Bristol) over the sail. [Pl. XVII. 1.]

This is evidently one of the early unauthorised tokens referred to by Ruding, under the year 1574, of which no specimen has been previously recorded. It was found during excavations in Bristol, about 1893.



2



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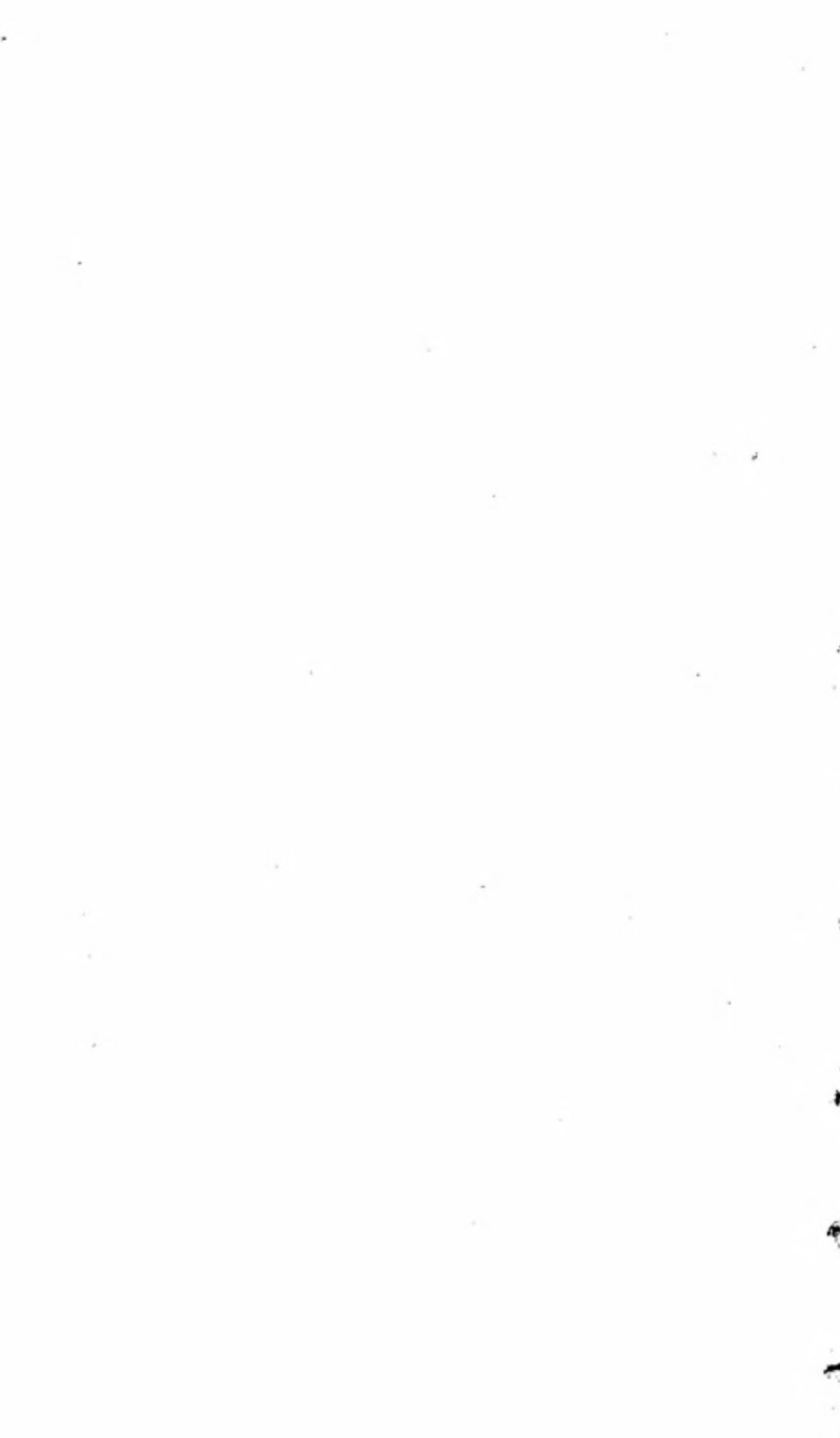


11



BRISTOL TOKENS

OF THE XVIITH AND XVIITH CENTURIES.



SQUARE OR DIAMOND-SHAPED FARTHINGS.

2. *Obv.*—C.B. (for Civitas Bristol) in large letters, within a circle. No legend.

Rev.—The arms of Bristol—a ship issuing from a castle to the left—within a circle. No inscription.

See Boyne's *Tokens*, 1858 edition, p. 88, No. 13.

3. *Obv.*—Similar to last.

Rev.—Similar, but with arms reversed—the ship sailing to the right. [Pl. XVII. 2.]

4. Similar to No. 3, but of smaller size, with the circles also smaller.

This specimen was found in 1897 amongst some dredgings from the Bristol Harbour.

5. *Obv.*—Similar to No. 2.

Rev.—The arms of Bristol upon a shield, within a circle; the ship sailing to the left.

The arms of the city here shown are correctly represented, but this typo has never yet been noticed.

This specimen was found in 1895 amongst some dredgings from the Bristol Harbour.

6. *Obv.*—Similar to last.

Rev.—Similar, but with the arms reversed; the ship sailing to the right. [Pl. XVII. 3.]

There are other minor differences in the types of these square farthings, but the specimens could hardly be classified as distinct varieties.

Seventeenth Century.

CIRCULAR FARTHINGS (circa 1651).

7. *Obv.*—C. B. in large letters, surrounded by the words A BRISTOLL FARTHING within a beaded circle.

Rev.—The arms of Bristol—a ship issuing from a castle to the left—within a beaded circle. [Pl. XVII. 4.]

8. Similar to last, but *cast*, not struck; of very rude workmanship, and doubtless a forgery of the time. [Pl. XVII. 5.]

This is not mentioned in Williamson's edition.

CIRCULAR (dated).

9. *Obv.*—C. B. in large letters, the date 1652 below, within a beaded circle, surrounded by the words, A. BRISTOLL. FARTHING, and having an outer circle; m.m., a star.

Rev.—The arms of Bristol, within a beaded circle, surrounded by the words, THE. ARMES. OF BRISTOLL, and an outer circle.

10. Similar to last, but with R below date, the initial of Rawlins, the engraver. [Pl. XVII. 6.]
11. Similar to last, but with a single "fleur-de-lis" over C. B.
12. Similar to No. 9, but the inscription reads BRISTOL.
13. Similar to No. 10, but *cast*, not struck; doubtless a forgery of the time.
14. Similar to No. 9, but dated 1660; m.m., a star.
15. Similar to last, but with R under date. [Pl. XVII. 7.]
16. Similar to No. 9, but dated 1662; m.m., a cinquefoil. [Pl. XVII. 8.]
17. Similar to last, but with R under date.

18. Similar to No. 9, but dated 1670, without engraver's initial; m.m., a cinquefoil. [Pl. XVII. 9.]
19. Similar to No. 9, but dated 1676.
See Henfrey's *Bristol Mint*, p. 365.
20. Similar to No. 9, but dated 1679.
See Henfrey's *Bristol Mint*, p. 365.

There are many specimens of these Circular Farthings with slight differences in the lettering, position of the ship, and thickness of metal, but they could not correctly be described as distinct varieties.

SEVENTEENTH CENTURY TOKENS ISSUED BY PRIVATE TRADERS.

21. *Obv.*—THOMAS. RICRAFT. IN. WINE. = A merchant's mark and a sheaf of arrows.

Rev.—STREETE. IN. BRISTOL = T. R.

This is the only private token mentioned in Mr. Williamson's edition.

Thomas Rieraft was a grocer, and was admitted into the liberties of the City, 21st January, 1640-1, "for yt he was ye apprentice of Edward Gerrishe, a freeman of ye same, and he paid iii. vi."

22. *Obv.*—WILLIAM : COOKE. = A sugar loaf between three cloves, within a small beaded circle.

O

Rev.—IN. BRISTOL = W. M, within a beaded circle.
[Pl. XVII. 10.]

Under the date 31st August, 1626, the Burgess' Roll of Bristol records: "William Cooke, Grocer, was admitted into ye liberties of this Citty, for that he was ye aprentise of William Pinny, and hath p^d iii. vi."

This token was dredged up from the Bristol Harbour in April, 1896; it was first notified by me in the *Numismatic Circular*, July, 1896, p. 1775.

23. *Obv.*—JOHN. BRADWAY. AT. THE = A mermaid.

Rev.—MRE MAYD. ON. THE. BACKE = I. B. (cinque-foil between initials). [Pl. XVII. 11.]

This token is mentioned by Boyne, 1858 edition (section ii., p. 527, No. 15), amongst those "without names of towns"; but in Mr. Williamson's edition it was omitted, as it could not then be traced. After much research, I claim it as a Bristol piece, based upon the following facts:

My specimen was brought to me from Nailsea, a village a few miles from Bristol, where it was dug up in the spring of 1896.

In the Burgess' Roll of Bristol, 12th April, 1636, is this entry: "John Breadwaye, Vintner, ys admitted into the liberties of this Citty for that he was the aprentyse of Wm. Thrupp, he hath pd iiiii. vi."

It is also interesting to note, that when "Sieur de la Boullage" visited Bristol, in 1644, in the course of his travels, he lodged "à la Serene" (at the "Mermaid," on the Back): see Gouz's *Voyages*, Paris, 1653, p. 430.

As to the "Backe," in that priceless Chronicle "The Maire of Bristowe is Kalendar," written by Robert Ricart, Town Clerk of Bristol, 18 Edward IV, under the year 1449 is this entry: "This yere the Bakke of Bristowe was repayred, al the egis of it and of the slyppes, with free stone:" and Miss Toulmin Smith, who edited this MS. for the Camden Society, adds the following note: "The Back is a river-side street extending along the

Avon southwards from Bristol Bridge. Back is a name of several streets in Bristol, as Augustine's Back, Red-cliff Back, St. James's Back, Hollow Back, and appears to mean the street at the back of the water, not to be the word 'beck,' as has been suggested, which would be applied to the water itself, not to the street."

In 1655 the "Mermaid" is mentioned in local documents amongst other houses infected by the plague.

In 1674 the "Mermaid" was used as a club-house.

In the earliest *Bristol Directory* (1775) it is mentioned that No. 4, Bristol Back ("The Mermaid"), was kept by William Beynon, Mast-maker and Victualler.

24. *Obv.*—JOHN. JENKINS. BRISTOLL. In three lines in script characters.

Rev.—John Jenkins in monogram.

The Burgess' Roll of Bristol records under 16th March, 1645-6, this entry:—"Ino. Jenkins, Currier, is admitted into the liberties of this Cittie for that hee was ye sonn of Jno. Jenkins, Currier, a freeman of the same, and hath paid . iiii. vi."

I have never seen this token; it was first mentioned in the *Numismatic Circular*, vol. i., p. 182, but Messrs. Spink have been unable to trace into whose possession it passed. See also vols. ii., p. 698, and v., p. 2027.

JOHN E. PRITCHARD.

MISCELLANEA.

A RARE PATTERN FARTHING OR JETTEN OF MARY II.—Among the so-called Pattern Farthings, Jettens, or Medalets struck in the joint reign of William and Mary, and described by the late Mr. H. Montagu in his work on the *Copper, Tin, and Bronze Coinage* (2nd edition, 1893, pp. 68 to 73), is an excessively rare variety of the farthing size, with the bust of Mary alone. Mr. Montagu did not possess a specimen, and had probably never seen one, as it is incorrectly described. As, however, I have been lucky enough to secure one, any doubts as to the reading of the *rev.* legend are set at rest.

Obv.—The Queen's bust to right, with the hair gathered up at the back in a knot, one lock flowing down in front: MARIA · II · DEI · GRA.

Rev.—A rose-branch with rose in full bloom, the severed portion leaning towards the left: CANDORE · HÆC · (*rosa?*) LILLIA (*sic*) VINCIT ·

The piece is of silver, in which metal only it appears to have been struck.

No specimen exists in the National Collection. It is described with the others in *Med. Ill.*, vol. i., p. 695, No. 94.

RICHARD A. HEBLYN.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

Die antiken Münzen Nordgriechenlands. Edited by F. Imhoof-Blumer. Band I, Part I, *Dacien und Moesien.* By Behrendt Pick. Berlin, 1898.

At last we have before us the first instalment of the great *Corpus Numorum* of the Berlin Akademie der Wissenschaften ;

for by this compendious title we have no doubt that the work, when completed, will continue to be popularly known (though it will not perhaps be officially so designated), for it will take rank with the *Corpus inscriptionum græcarum*, &c., published under the auspices of the same learned body.

The genesis of the present work is due to the energetic advocacy and influence (and we may add liberality) of Theodor Mommsen, who has for years been urging upon numismatists the great importance of undertaking a complete *Corpus* of all the known Greek coins preserved in the chief public and private collections of Europe.

Most fortunately the Berlin Academy has been able to secure, as general editor of the first section of this colossal compendium, the services of a practical numismatist whose name alone is a sufficient guarantee of the scientific value of any numismatic work to which it is attached.

The first section of the *Corpus* will form a complete entity containing descriptions of all the coinages of Northern Greece in three volumes. Volume I, comprising the coins of Dacia, Moesia, and the coasts of the Euxine as far as the mouth of the Borysthene, and Volume II, the coins of Thrace, are undertaken by Prof. B. Pick, of Gotha. Volume III will be by Dr. H. Gaebler, of Berlin, and will contain the coins of Macedon, excepting those of Alexander the Great, which, as a world-wide currency, must, of course, be separately dealt with.

To review in detail a work such as now lies before us would far exceed the limits of space at our disposal. The learned and exhaustive historical treatises which precede the descriptions of the coins of the several provinces will repay a lengthened study, and will be indispensable to the student, and the careful and exact catalogues which follow these will be invaluable to the numismatist. In compiling these catalogues Dr. Pick has had before him a large number of casts from various collections of every variety described, some of course showing more than others, and, together, enabling him to draw up a full and complete description of the original dies. There are in the present half volume 2,108 such descriptions, representing fully ten times that number of specimens, originals, or casts, examined by the author. The corresponding portion of the *British Museum Catalogue* describes only 265 separate coins. These figures are sufficient to give some idea of the vast work which the German Academy has undertaken, and which the compiler has so far most successfully accomplished. Nor is this all, for at the foot of each page descriptions are given of many other specimens which Dr. Pick has not been able to verify, but which have an undoubted value of their own,

although they are frequently incorrectly described by the older writers.

We cannot close this notice without a word of praise for the plates, twenty in number, beautifully executed by Brunner, of Zürich. Among them we would draw special attention to the series (Plates XIII—XX) which show at a glance the prevailing types of Dacia and Moesia. On these plates the types are arranged according to subjects, *e.g.*, Zeus, Poseidon, Apollo, River-gods, Personifications, Animals, Temples, &c., &c., in the same manner as in the *Brit. Mus. Cat., Alexandria*. In the concluding part of Vol. I we hope that a table will be provided to enable the student to refer back expeditiously from the plates to the running number in the text.

B. V. H.

A Handbook of Greek and Roman Coins. By G. F. Hill, M.A., of the Department of Coins and Medals in the British Museum. London: Macmillan & Co., 1899.

Two whole generations have passed since Akerman, in that part of his *Numismatic Manual* which deals with classical antiquity, endeavoured to supply an introduction to the study of Greek and Roman coins. Between 1840, when Akerman's *Manual* was issued in its improved form, and the present year, a whole numismatic literature has grown up, and, in many respects, a new science. The vast mass of new matter—the new views and new methods—is the measure of the increased difficulty in the concise treatment of the subject. It is characteristic of the new position in which students are now placed, that Mr. Hill's *Handbook* does not attempt, as Akerman did, to pursue the subject—so far, at least, as English numismatics were concerned—through mediæval and modern times. He has felt, and reasonably felt, that even to deal with the whole of Greek and Roman numismatics is almost beyond the competence of any single numismatist, and has consequently omitted the continuation of the Roman series in the Eastern Empire. The point of view is also largely changed. The mere collector has been obviously less in Mr. Hill's mind than the archæologist, who has to regard at least a general acquaintance with ancient coins as a part of his necessary equipment. For this very reason his book has a special value, as containing almost on every page the evidence of how largely numismatic studies go to the root of all scientific archæology. Nowhere more than on coins can be obtained such precise evidence as to the development and progressive chronology of local schools and styles, the meaning of religious types, the commercial and

political relations of ancient states, as shown by their standards and monetary alliances, the official titles of their magistrates and dynasts. The value of monetary inscriptions for epigraphic study can hardly be over-estimated, and Mr. Hill has put together some useful data on this head in a special section. Yet in some standard works on epigraphy the numismatic evidence is almost wholly neglected.

It is hardly necessary to say in these pages that the vast subject with which he deals has been treated by the author in a most scholarly manner. Mr. Hill has not shrunk from facing the most difficult of all numismatic questions, those relating to the coin standards of antiquity. In one respect, perhaps, he hardly takes sufficient count of the tendency of some new evidence. While tracing the influence of the Babylonian and related Phœnician standards on the Hellenic world, he has hardly allowed for the pre-existing factors in Greek metrology, of which some Mycenæan finds seem to yield conclusive demonstration. From a study of the rings and spirals found in the Akropolis tombs at Mycenæ, Professor Ridgeway had already been led to infer the existence of the gold "stater" in prehistoric Greece, weighing about 135 grains (8·7 grammes). From an examination of the gold rings of the "late Mycenæan" treasure from Ægina, the present writer was independently led to precisely the same conclusion, and the preponderant dependence of Mycenæan civilisation on Egypt makes it probable that this very early Greek standard represents in fact a slight variation of the Egyptian *Kat* of 140 grains.

This ancient stater of 135 grains, which represents the præ-Pheidonian standard in Ægina, and at Mycenæ itself goes back to the sixteenth century before our era, coincides with the later Corinthian and Eubœic silver standards. It is, indeed, far simpler to infer in these cases the continuance of a pre-existing indigenous standard, than to assume, as has hitherto been done, that the Eubœans and Corinthians deliberately, and as it would seem against their own interests, raised the Asiatic gold standard and applied it to their silver currency. The survival of an ancient Hellenic metric system is the less surprising when it is further realised to how large an extent the proto-Corinthian, like the proto-Argive art, is itself an outgrowth of the Mycenæan.

A good deal might also be said in this connexion on the great indebtedness of the "archaic" Greek coin-types to certain prevalent designs on the Mycenæan lentoid gems. This indebtedness has not been as yet sufficiently realised, but it explains the origin of a whole series of early coin-types which have hitherto been set down as due to "oriental" influence. To a

certain extent no doubt, this latter phenomenon should rather be regarded as due to a deliberate revival, akin to the adoption of classical models by *Quattro* and *Cinque-Cento* Italian artists. Archaic Greek art is indeed, as has been well said by M. Salomon Reinach, itself largely the art of a Renaissance.

On one not unimportant metrological point I find myself at variance with Mr. Hill's conclusions. He approves of the view that the original νοῦμμος or *nummus* at Tarentum and other cities was a diobol. The name νοῦμμος was, according to Aristotle, given at Tarentum to a coin with the type of Taras riding on a dolphin, and this, as Mr. Hill admits, might be taken as presumptive evidence that he referred to the stater, on which this was the unvarying type. The existence of a few diobols of this type—of excessive rarity and probably struck later than Aristotle's time—can hardly be urged against the rational interpretation of the meaning of his statement, which would otherwise be in the highest degree misleading. The estimate of the *nummus* is, moreover, fully corroborated by the Sicilian and Etruscan evidence. The old Sicilian talent, as we know from the great Tauromenitan inscriptions, contained 120 litras, in other words, 24 drachmæ, and seems to have consisted first of 12, and later, after Dionysios' great reduction, of 24 *noummoi*; so that here, as at Tarentum, the original *noummos* was a didrachm. We have here, too, the source of the original Etruscan *nummus*, a didrachm consisting of 10 libræ or litras, like the Sicilian. Over a large part of Italy the Dionysian Empire was in many respects an anticipation of the Roman, and the effects of the tyrant's drastic financial expedients must have been felt far beyond the borders of his vast dominions. There can be little doubt that a direct consequence of these is to be traced in the reduction of the later Etruscan *nummus* or didrachm to a drachm weight, which is henceforth divided into 10 "little libræ" or *libellæ*. In this way originated the Roman denarius, which retained the same division and the traditional name of *nummus*. "Nummi denarii decuma libella"—the statement of Varro—properly understood, contains the whole matter in a nutshell. The more familiar *nummus sestertius* was due to a later method of reckoning.¹ It does not seem to me that the ingenious conclusions drawn from the later bronze coinage of Teate and Venusia seriously affect the more obvious reading of the earlier evidence.

I confess myself unable to follow Mr. Hill's remarks on the engraving of ancient dies. He quotes Mongez for the state-

¹ See on all this, *Numismatic Chronicle*, 3rd series (1894), p. 223 *seqq.*

ment that "the instrument for engraving ancient gems was also employed for coin-dies, viz., the wheel. The graving tool was not introduced until late Roman times, in the fourth or fifth century." But, as a matter of fact, from the earliest times a variety of instruments were employed in engraving ancient gems. The wheel is one of these, but the blunt point or "bouterolle," with its globular button-like end, the hollow drill, the saw, and the actual graver and diamond-point were also freely employed. Although it is easier to judge of the technique of an intaglio than of a die of which we have only the impression, there is every reason to believe that precisely the same instruments were employed in engraving ancient dies. No authentic example of a Greek die exists, but a near illustration is supplied by a bronze *matrix* for executing *repoussé* work, found in Corfu and now in the Ashmolean Museum (*J. H. S.* xvi. p. 823 *seqq.*), containing a series of characteristic early Corinthian types. These are executed entirely in accordance with the gem engraver's technique. It is, indeed, in the highest degree probable that ancient gem-engravers were also employed in engraving coin-dies. A beautiful sard intaglio, originally set in a ring, found at Catania, so exactly reproduces in style and subject the Herakles and lion of some gold hundred-litra pieces, the dies of which were engraved by Evænetos for the Syracusan mint, that there can be little doubt that we have here the handiwork of the same artist, who also worked at Katanê. On the gem, however, the operation of three instruments can be clearly discerned—the wheel, the "bouterolle," and the diamond-point.

There are a few other statements that require modification or correction when, as may be confidently predicted, Mr. Hill's *Mannal* reaches another edition. The indications as to Roman Imperial geography and organisation are not all that could be desired. "In Italy," Mr. Hill states (p. 20), "the most important gold mines were in Transpadane Gaul, where the State took over the mines formerly belonging to the Tanrisci." But the Taurisci were the principal tribe of ancient Noricum, and the mines in question lay near Neumark in Styria. Perhaps Mr. Hill was thinking of the Salassian gold-washings in the Val d'Aosta. On the same page Moesia is described as "Hungary and Siebenbürgen," but except for a small angle in the Banat, it occupies the present Serbia and Danubian Bulgaria. The misprint, twice repeated, "Sirmio" for Sirmium—the great Imperial centre of the Danubian provinces—suggests a more familiar acquaintance with Catullus than, say, Ammianus. It does not seem quite correct to say that the Spanish silver-mines ever "belonged" to rich individuals. Rather their working was

farmed out to them by the Government. It is, moreover, difficult to reconcile a right understanding of the Roman municipal system with the statement that "the duumviri were usually elected annually; but in some colonies we meet with duumviri quinquennales who were appointed every fifth year." As a matter of fact, the title of duumviri quinquennales was simply that borne in all municipia by the annually elected duumviri (or other chief municipal officers) during the census year. The title covered the additional censorial functions fulfilled every fifth year by the ordinary magistrates.

In spite of a few minor blemishes, Mr. Hill's Manual can be confidently recommended as containing in a short compass a vast amount of methodical information on ancient numismatics. The views put forward are generally just and sober, and useful corrections will be found of some too ingenious theories on such subjects as the origin of coin standards, or the alleged issue of private coinages by ancient bankers. Interesting sections are included on the meaning and classification of coin-types, on coin-inscriptions, and the materials for chronological arrangement, in which due weight is given to the evidence of finds. The work is provided with useful tables, appendixes, a select bibliography, three indexes, and fifteen collotype plates of coins, as well as process-blocks in the text.

ARTHUR J. EVANS.

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PROCEEDINGS OF THE NUMISMATIC SOCIETY.

SESSION 1898—1899.

OCTOBER 20, 1898.

SIR JOHN EVANS, K.C.B., D.C.L., LL.D., Sc.D., F.R.S.,
V.P.S.A., F.G.S., President, in the Chair.

Philip G. Laver, Esq., M.R.C.S., was elected a Member.

The following presents were announced and laid upon the
table:—

1. *Mémoires de la Société royale des Antiquaires du Nord*,
1897.

2. *Aarbøger for Nordisk Oldkyndighed og Historie*. Heft 4,
1897, and 1 and 2, 1898.

3. *Bonner Jahrbücher*. Heft 102.

4. *Monatsblatt der numismatischen Gesellschaft in Wien*.
Nos. 178—182.

5. *Mémoires de la Société des Antiquaires de la Morinie*.
Tomes 24—26.

6. *American Journal of Archæology*. Ser. II. Vol. i.
Nos. 4 and 5.

7. *Numismatische Zeitschrift*. Jan.—June, 1898.

8. *Rivista Italiana di Numismatica*. Fasc. 2 and 3. 1898.

9. *Revue Numismatique*. 2^{me}. and 3^{me}. Trimestre. 1898.
10. *Revue Belge de Numismatique*. 3^{me}. and 4^{me}. Livr.
1898.
11. *Bulletin de Numismatique*. April—August, 1898.
12. *Revue Suisse de Numismatique*. Vol. vii., 2^{me}. Livr.,
and Vol. viii., 1^{er}. Livr.
13. *Journal of the Institute of Bankers*. Vol. xix. Parts VI.
and VII.
14. *Zeitschrift für Numismatik*. Vol. xxx. Heft 1 and 2.
15. *Some Spanish-American Proclamation Pieces*. By B.
Betts. From the Author.
16. *Bulletin de la Société des Antiquaires de l'Ouest*. 4^{me}.
Trimestre, 1897, and 1^{er}. Trimestre, 1898.
17. *Proceedings of the Royal Irish Academy*. Vol. iv.
No. 5.
18. *Bulletin historique de la Société des Antiquaires de la
Morinie*. Livr. 186.
19. *Journal of Hellenic Studies*. Vol. xviii. Part I.
20. *The Hsi Hsia Dynasty of Tangut, their Monoy and
Peculiar Script*. By S. W. Bushell, M.D. From the Author.
21. *Un Gros à l'effigie en pied de Jean d'Areket*. By the
Vicomte B. de Jonghe. From the Author.
22. *Bulletin de La Société Suisse de Numismatique de 1879-
1896*. 2^{me}. Livr.
23. *Smithsonian Report*. 1896.
24. *L'Atelier monétaire du Prince Noir à Limoges en 1365*.
By A. Blanchet. From the Author.
25. *Notizie di Pietro da Fano, medaglista*. By G. Castellani.
From the Author.
26. *Proceedings of the Annual Meeting of the American
Numismatic and Archaeological Society*. 1898.
27. *Le Noble de Gand (1582)*. By the Vicomte B. de
Jonghe. From the Author.
28. *Un Tiers de Sou d'or de Maestricht*. By the Vicomte B.
de Jonghe. From the Author.

29. Journal of the Royal Society of Antiquaries of Ireland.
1898. Part III.

The President exhibited two extremely fine Roman aurei, bearing the portraits of Caracalla and Geta. On one piece Caracalla is represented in half-length figure with his right hand raised, as on the "Adlocutio" coins.

Mr. T. Bliss exhibited three British staters of Boduoe and Verica and two quarter-staters of Verica and Tincommius, the last coin having for reverse type the facing head of Medusa.

Mr. L. A. Lawrence showed a series of pennies of the first short-cross issue of Henry II, on which all the mints were represented except that of Norwich. The penny of York bears the name of Isaac as moneyer, a personage mentioned by Sir Walter Scott in *Ivanhoe*.

Mr. F. A. Walters exhibited a groat of the last coinage of Edward III, bearing the French and Aquitaine titles. This is one of the rarest silver coins of that reign.

Mr. F. Spicer showed a series of pennies of Richard II, struck at York by Archbishop Nevill.

Mr. H. Goodacre exhibited a silver heart-shaped locket containing a portrait of Charles I.

Mr. E. J. Seltman communicated a paper on a wall-painting of the interior of a Roman mint, discovered a few years ago at Pompeii, in the so-called house of the Vettii. This wall-painting had already been described by Mr. Talfourd Ely in the *Numismatic Chronicle* for 1896; but Mr. Seltman differed considerably from him in the interpretation of the actions performed by some of the figures in the composition, especially that of the principal figure in the centre, which is winged. Mr. Ely considered that this figure represented the *monetalis*, or master of the mint, but Mr. Seltman viewed it as a personification of Juno Moneta herself, the presiding divinity of the Roman mint. This opinion was strengthened by the fact that her wings appeared to be ornamented with

eyes from peacock feathers. The writer also discussed the actual striking of the coins in ancient and mediæval times. This paper is printed in vol. xviii., p. 294.

Mr. G. F. Hill gave an account of a large hoard of Roman aurei discovered early in this year in the territory of the Rajah of Pudukota. The hoard consisted of 501 specimens, ranging from Augustus to Vespasian. The larger number were of the reigns of Tiberius and Nero. A singular feature was that more than ninety per cent. of the coins had been defaced by a deep cut across the heads of the emperors or empresses. This appears to have been done, not with the object of testing the metal, but rather to put the coins out of circulation on account of their worn stato. This paper is printed in vol. xviii., p. 304.

NOVEMBER 17, 1898.

SIR JOHN EVANS, K.C.B., President, in the Chair.

William John Davis, Esq., William John Hocking, Esq., and Maurice Jonas, Esq., were elected Members.

The following presents were announced and laid upon the table:—

1. Journal of the Institute of Bankers. Vol. xix. Part VIII.
2. American Journal of Archæology. Ser. II. Vol. i. No. 6.
3. Report of the Madras Government Museum. 1897-8.
4. Monatsblatt der numismatischen Gesellschaft in Wien. No. 183.
5. Bulletin de Numismatique. Sept.—Oct., 1898.
6. Monete Greche. By S. Ambrosoli. From the Author.
7. The Canadian Antiquarian and Numismatic Society. Proceedings. Ser. III. No. 3.

Mr. W. J. Androw exhibited some new varieties of the coinage of Stephen.

Mr. T. Bliss exhibited two bronze coins of Cunobeline, quinarii of Tasciovanus and Epatiecus, a stater of Addedomaros, and a silver Gaulish coin.

Mr. L. A. Lawrence exhibited twenty long-cross pennies of Henry III, each mint being represented by one coin.

Mr. C. E. Mackerell showed two "large brass" coins of Antoninus Pius, with the reverse legend BRITAN: on one Victory stands on a globe surrounded by waves, and on the other she is seated on the globe, also amidst waves.

Mr. W. T. Ready showed an unpublished variety of a penny of Edward the Confessor.

Mr. C. R. Peers read a paper "On Swiss Bracteates in the British Museum Collection." He divided these bracteates into two classes—(1) those of Swiss fabric, and (2) those of Swabian fabric—and enumerated the mints at which these different classes were struck, pointing out that in some instances bracteates of both classes were issued from the same mint. He selected the following coins as being of special interest: (1) the Austrian series of Zofingen; (2) the round bracteates of Schaffhausen and Zurich, in connection with which he incidentally referred to a coin, not a bracteate, which was dated 1424 in Arabic numerals, a date earlier by forty-five years than the earliest example of Arabic numerals on any other mediæval coin known to him; and (3) the alliance coinage of Zofingen with Zurich in the thirteenth century. This paper is printed in vol. xix., p. 12.

DECEMBER 15, 1898.

OLIVER CODRINGTON, Esq., M.D., Librarian, in the Chair.

Major D. Lindsay Carnegie and Horace W. Monckton, Esq., F.L.S., F.G.S., were elected Members.

The following presents were announced and laid upon the table:—

1. The Token Coinage of Warwickshire. By W. J. Davis. From the Author.

2. Bulletin historique de la Société des Antiquaires de la Morinie. Livr. 187.

3. Bulletin de la Société des Antiquaires de l'Ouest. 2^{me}. Trimestre, 1898.

4. Monatsblatt der numismatischen Gesellschaft in Wien. No. 184.

5. La Gazette Numismatique. Dec. 1898.

6. Bulletin de Numismatique. Nov. 1898.

7. Journal of the Institute of Bankers. Vol. xix. Part IX.

8. Archæologia Aeliana. Vol. xx.

9. Bonner Jahrbücher. Heft 103.

10. Proceedings of the Royal Irish Academy. Vol. v. No. 1.

Mr. W. C. Boyd exhibited two copper coins of Constantine the Great struck while Cæsar. Both were of the "Genio Populi Romani" type; but one was remarkable in having on the obverse the bust of Constantine armed with spear and shield. This particular type appears to have been unknown hitherto.

Mr. L. A. Lawrence exhibited a sixpence of Charles I of the Tower Mint with the triangle mint-mark. It weighed eighty-four grains, or nearly double the weight of the then current sixpence.

Mr. J. B. Caldecott showed a series of Spanish silver coins counter-struck for currency in Jamaica. The earlier pieces were counter-marked with c. n. in a plain circular indent; the later ones with o. n. in script letters under a crown.

Mr. L. A. Lawrence read a paper on a find of groats of late Plantagenet and early Tudor times. He pointed out that the state of the coins served as a guide to their chronological issue, and showed that the evidence afforded by the hoard confirmed

the sequence of the mint-marks of Edward IV and Henry VII as recently suggested by him.

Mr. J. E. Pritchard communicated a paper on copper and lead tokens struck at Bristol in the sixteenth and seventeenth centuries. From the evidence of Orders in Council and Corporation records it would appear that, though rarely met with at the present time, these tokens were issued in very large numbers in 1578 and following years, and formed the principal small currency in Bristol and the immediate neighbourhood. The issue of the seventeenth-century pieces also lasted until 1679, which was several years after the general suppression of such tokens.

JANUARY 19, 1899.

OLIVER CODRINGTON, Esq., M.D., Librarian, in the Chair.

The following presents were announced and laid upon the table :—

1. Syracuse. Les Monnaies d'argent et d'or au point de vue artistique ; la Coiffure antique et ses développements successifs. By Le Comte Albéric du Chastel de la Howardries. From the Publishers, Messrs. Spink and Sons.

2. Revue Belge de Numismatique. 1^{er}. Livr. 1899.

3. Monatsblatt der numismatischen Gesellschaft in Wien. No. 185.

4. Transactions and Proceedings of the Japan Society of London. Vol. iv. From the Society.

5. Aarbøger for Nordisk Oldkyndighed og Historie. Hæft 8, 1898.

6. The Numismatic Circular. Vols. i.—vi. From the Publishers, Messrs. Spink and Sons.

7. Archæologia Cantiana. Vol. xxiii. From the Kent Archæological Society.

8. War Medals and Decorations. Second edition. By D. H. Irwin. From the Publisher, L. Upcott Gill.

9. *Revue Numismatique*. 4^{me}. Trimestre, 1898.

10. *La Gazette Numismatique*. Jan. 1899.

11. Deux Monnaies d'or de Jean II, Seigneur de Wessenach, 1415—1464. By the Vicomte B. de Jonghe. From the Author.

12. *Journal of Hellenic Studies*. Vol. xviii. Part II. From the Hellenic Society.

13. *Journal of the Institute of Bankers*. Vol. xx. Part I. From the Institute.

14. *Bulletin de la Société des Antiquaires de l'Ouest*. 3^{me}. Trimestre, 1898.

Mr. T. Bliss exhibited some rare pennies of kings of Mercia, including Offa, Coenwulf, Berhtulf, and Ceolwulf.

Mr. W. C. Boyd exhibited some pennies of Eadred and Eadgar, all bearing the names of unpublished moneyers or being unpublished varieties.

Mr. L. A. Lawrence showed a series of groats, half-groats, pennies, &c., of Henry IV and V, and invited members to bring to his notice any varieties of these coins, as he hoped to throw some fresh light on the classification of this series.

Mr. P. Nelson contributed a paper on coins and tokens of the Isle of Man. Having given a slight sketch of the history of the island, especially in reference to its numismatics, Mr. Nelson traced the origin and development of the Triskelis or Triune, the heraldic Manx symbol. This sign was shown to be of considerable antiquity, as it is found on coins of Lycia and Pamphylia of the sixth century B.C., and at later times on those of Syracuse and on Roman republican denarii. Its original connection with the Isle of Man was difficult to trace, but Mr. Nelson supposed that it may have come through Alexander III of Scotland, who was also King of Man and the Isles, and whose wife was the sister of the Queen of Sicily. The circumstance that its first appearance with the motto "Quocunque jeceris stabit"

was about that time (A.D. 1266—86) seemed to bear out this view. The writer then described the currency of the island, which, with the exception of a few tokens of the seventeenth century, consisted only of pennies, halfpennies, and farthings of the eighteenth and nineteenth centuries. These pieces were first issued by the Derby family, who were "Lords of Man," and afterwards by the Athols, who succeeded to the title by right of inheritance. When the Isle of Man was incorporated in 1765 with the British dominions by purchase, the coinage assumed a regal character, and continued so till 1839, the date of the last issue of a separate currency. In 1840 all coins, except those of English type, were suppressed by Act of Parliament. This paper is printed in vol. xix., p. 35.

FEBRUARY 16, 1899.

OLIVER CODRINGTON, Esq., M.D., Librarian, in the Chair.

The following presents were announced and laid upon the table :—

1. Journal of the Royal Society of Antiquaries of Ireland. Vol. viii. Part IV.

2. Bulletin historique de la Société des Antiquaires de la Morinie. Livr. 188.

3. Alfred von Sallet, Nekrolog. By R. Weil. From the Author.

4. Rivista Italiana di Numismatica. Fasc. 4. 1898.

5. The American Journal of Archaeology. Vol. II. Nos. 3 and 4.

6. Monatsblatt der numismatischen Gesellschaft in Wien. No. 156.

7. Bulletin de Numismatique. Dec. 1898.

8. Foreningen til Norske Fortidsmindesmerkers Bevaring. Proceedings, 1897.

9. Kunst og Haandverk fra Norges Fortid. 1897. By N. Nicelaysen. From the Author.

10. Journal International d'Archéologie Numismatique. Vol. i. Part IV. 1898. From the Editor, J. N. Svoronos.

11. Römische Silberbarren mit Stempeln. By Heinrich Willers. From the Author.

Mr. L. A. Lawrence exhibited some forgeries of coins of Stephen and Matilda, of Stephen alone, and of Robert, Earl of Gloucester, which by some numismatists have been considered to be genuine, and have been usually described as being of "Boulogne work."

Mr. T. Bliss exhibited some unpublished varieties of pennies struck at Canterbury by the Archbishops Wulfred, Ceolnoth, and Plegmund.

Mr. W. Webster showed a Roman denarius struck in Spain during the reign of Galba, having on the obverse a helmeted head and the legend "Adsertor Libertatis," and on the reverse Victory erecting a trophy, and also a denarius of Carausius with the head of Sol on the reverse and the inscription "Clarit. Carausi Aug."

Mr. E. O. Krumbholz exhibited the French franc piece of 1898, by the artist Roty, having on one side a representation of a sewer, and on the other a laurel-branch with mark of value, &c. This piece was soon withdrawn from circulation on account of its unsuitability for general currency.

Mr. R. Ll. Kenyon communicated a paper on the Shrewsbury mint and its officers under Henry III. The paper was based on a Roll, still in existence among the Shrewsbury Borough Records, giving an account of the assays made by the Keepers of the Dies between January 29th, 1248-9, and February 9th, 1249-50. From this document it appears that during that period pennies to the amount of £7,167 were struck in Shrewsbury alone. Mr. Kenyon described at some length the status of the moneyer, whose name appeared on the coinage. From the evidence of contemporary records it is

certain that the moneyer was not the actual engraver of the coin-dies; but he was a burgess of the city and a man of means, of responsibility, and of strict integrity. His principal duties were to receive the dies from the Exchequer Court in London, to procure the silver and the alloy from which the coins were struck, and to direct and superintend the making of the coins. The author also gave some interesting particulars as regards the status of the other mint officers, amongst whom were the Keeper of the Dies, the Assayer, the Clerk for the Keeping of the Exchange, and others; and also as to various regulations relating to the trial of the Pyx. This paper is printed in vol. xix., p. 112.

Mr. E. J. Seltman, in a short paper, replied to some criticisms of M. Six on a previous article by him on coins of Rhegium. In that article Mr. Seltman claimed for the seated figure on the reverse a representation of Aristæus. M. Six, on the other hand, associated the figure with Iocastos, the founder of the city of Rhegium, who, it is said, died from the effects of a snake-bite. From the illustrations of the coins M. Six argued that the coins showed the serpent actually attacking the figure of Iocastos. In his reply Mr. Seltman, who had had opportunities of examining either the original coins or plaster casts of them, contended that on none of them was there any sign of the serpent biting the figure, and that what M. Six had taken for the serpent's head was a mere break in the arrangement of the drapery around the hips. In this respect, therefore, M. Six's arguments could not be maintained. This paper is printed in vol. xix., p. 5.

MARCH 16, 1899.

OLIVER CODRINGTON, ESQ., M.D., Librarian, in the Chair.

Colonel Gerald Boyle was elected a Member.

The following presents were announced and laid upon the table :—

1. American Journal of Archæology. Vol. ii. No. 5. From the Institute.

2. Proceedings of the Society of Antiquaries of London. Vol. xvii. No. 1.

3. Catalogue of Greek coins in the British Museum. "Galatia, Cappadocia, and Syria." By Warwick Wroth, F.S.A. From the Trustees of the British Museum.

4. Monatsblatt der numismatischen Gesellschaft in Wien. No. 187.

5. Kong. Vitterhets Historie och Antiquitets Akademiens Månadsblad. 1895.

6. Grundzüge der Münzkunde. By Hermann Dannenberg. From the Author.

7. Journal International d'Archéologie Numismatique. Pts. 1—8. 1898. From the Editor, J. N. Svoronos.

Mr. L. A. Lawrence exhibited some forgeries of coins of Henry I, of Matilda, the Empress and mother of Henry II, and of Stephen, for the striking of which the dies had been interchanged.

Mr. Talbot Ready exhibited an unpublished hecte of Phocæa, with the obverse type a ram rubbing its head with its hind foot, and on the reverse a quadripartite incuse; and a copper uncia of Britannicus.

Mr. T. B. Caldecott showed impressions in copper of the Maryland sixpence, issued by Lord Baltimore, and of the Massachusetts shilling of 1652.

Mr. T. Bliss exhibited some pennies of Aethelstan of East Anglia, of St. Eadmund, and of Regnald II and Anlaf of Northumbria, some of these being unpublished varieties.

Mr. E. C. Krumbholz communicated a paper on the recent issues of French coins in gold, silver, and copper. In illustration of his paper Mr. Krumbholz exhibited specimens of the

2 franc, 1 franc, and 50 centime pieces in silver, and of the 10, 5, 2, and 1 centime pieces in copper. Of the 20 franc piece, which has not yet been issued for circulation, a drawing was shown. These new coins are by the artists M. Chaplain, M. Roty, and M. Dupuis.

Mr. L. A. Lawrence read a correspondence which had passed between himself and Mr. W. J. Andrew on the origin of the dies of Early English coins. Mr. Lawrence expressed it as his opinion that at intervals before the Norman Conquest and from that date the dies were made at one centre, from which they were transferred to the local mints to be used for striking the coins. Mr. Andrew took a more modified view, and held that in many cases the dies were of local fabric, but were probably made from designs supplied by the Exchequer in London. In a discussion that followed Mr. Grueber said that, in the absence of records and documentary evidence, conclusions could only be drawn from the general style and fabric of the coins. Judging from these, he was of opinion that down to the reign of Eadgar of Wessex (on account of the absence of uniformity of style in coins of the same type) there was no common centre for the making of the dies, but that from the reign of Æthelred II the coins showed that the dies were made in one place, and thence transmitted to the local mints. This statement he corroborated by referring to "Domesday," wherein it was ordered "that the local moneyers should repair to London to receive the new dies for the striking of coins, and on receipt of which each one should pay a fine of twenty solidi, and a further fine of the same amount per month so long as the dies were in use."

APRIL 20, 1899.

SIR JOHN EVANS, K.C.B., President, in the Chair.

John E. Pritchard, Esq., and M. Michel P. Vlasto were elected Members.

The following presents were announced and laid upon the table:—

1. Catalogue of Greek Coins in the Hunterian Collection, University of Glasgow. Vol. I. By George Macdonald. Presented by the Trustees of the Publication Fund.

2. Numismatische Zeitschrift. July—December, 1898.

3. Rivista Italiana di Numismatica. Vol. xii. Fasc. 1.

4. Revue Numismatique. 1899. 1^{er}. Trimestre.

5. Bulletin de Numismatique. Fév.-Mars. 1899.

6. Revue Belge de Numismatique. 2^{me}. Livr. 1899.

7. Les Médailles et Plaquettes modernes, sous la Rédaction du Dr. H. J. de Dompierre de Chaufepié. La Haye. Livr. I. From the Editor.

8. The Smithsonian Report. 1896.

9. Double-Tiers du Thaler de Jean François de Bronckhorst. By the Vicomte B. de Jonghe. From the Author.

10. Monatsblatt der numismatischen Gesellschaft in Wien. Nos. 188 and 189.

11. La Gazette Numismatique. April, 1899.

The President exhibited an octadrachm of Arsinoë, wife of Ptolemy Philadelphus of Egypt, which came from a find made some few years ago.

Lady Buckley exhibited two groats of Edward II, struck in London, with the mint-marks an annulet and a cross crosslet; another of Henry VI of the rosette-mascle coinage; a proof of the obverse of the "Incorrupta Fides" crown by Wyon of George III; also a proof of the obverse of the half-crown of William IV before letters, and the shell of the obverse of the sixpence of 1817 of George III.

Mr. Maish sent for exhibition a crown in silver of Cromwell by Thomas Simon, which showed that its date had been altered from 1657 to 1658.

Mr. W. C. Boyd exhibited a styca of Æthelred II of Northumbria with blundered legends, and a dupondius of Augustus

struck in Spain by the legate P. Carisius, of which Cohen (2nd ed.) only illustrates an imperfect specimen.

Mr. C. F. Spink exhibited a farthing of Edward I, reading "Lodriensis" for "Londoniensis"; and the Rev. F. Binley Dickinson two volumes, one containing autographs of well-known numismatists from about 1840, the other a series of portraits of numismatists and collectors of coins from the sixteenth century to the present time.

Mr. Grueber read a paper on a penny of Æthelred II, struck at Derby, and having on the obverse the Agnus Dei, and on the reverse the Holy Dove. The coin belongs to Mr. F. G. Hilton Price, and was found some few years ago in London. Mr. Grueber considered that this coin was struck towards the end of the reign of Æthelred II, and that the type referred to his restoration in 1014.

Mr. Grueber also read a paper on a penny of Eadgar having on the reverse a mitre, and a halfpenny of the same king with a rose-branch for reverse type. Both coins were attributed to the York mint, the second being unique, as no other halfpenny is known of this reign.

MAY 18, 1899.

SIR JOHN EVANS, K.C.B., President, in the Chair.

Harold Bolles Bowles, Esq., was elected a Member.

The following presents were announced and laid upon the table:—

1. Bulletin de Correspondance Hellénique, 1894—1898.
2. Journal International d'Archéologie Numismatique. Vol. i. By J. N. Svoronos. From the Editor.
3. Head, "Historia Numorum," translated into Greek by J. N. Svoronos. From the Translator.

4. The Annual of the British School at Athens. Nos. 1—3. From the School.

5. The Mahaksatrapas and Ksatrapas of Surastra and Malava. By E. J. Rapson. From the Royal Asiatic Society.

6. Bulletin de la Société des Antiquaires de l'Onest. 4^{me}. Trimestre, 1898.

7. Archæologia Aeliana. Vol. xxi.

8. Bulletin de Numismatique. Avril, 1899.

9. Bulletin historique de la Société des Antiquaires de la Morinie. Livr., 189.

10. Mémoires of the same. Vol. xxv.

11. Journal of the Royal Society of Antiquaries of Ireland. Vol. ix. Part I.

12. Proceedings of the Society of Antiquaries of Scotland. Vol. xxxii.

13. La Gazette Numismatique. No. 8. 1889.

14. Annual Reports of the Smithsonian Institute for 1896-1897.

15. Adolphe Occo III, et sa Médaille. Par C. Piquè. From the Author.

16. Four Plates of Photographs of the rarest and finest Greek silver coins in the collection of Frank Sherman Benson. From Mr. F. S. Benson.

Mr. P. Bearman exhibited a penny of Æthelred II, struck at Thetford, with the crowned bust of the king on the obverse, and a cross pattée surrounded by four smaller crosses on the reverse, an unpublished combination; also a penny of the same reign struck at Barnstaple, of the "Crux type."

Mr. L. A. Lawrence showed a small pocket-balance of the eighteenth century, for weighing guineas and half-guineas.

Mr. G. F. Hill exhibited a photograph of a mass of corroded copper coins of Cyrene, belonging to Mr. G. Armes, of Eastbourne, which is said to have been formerly in the possession of the late Sir Francis Drummond, the Consul-General in Tripoli. This mass of coins weighed over 13 lbs.

Mr. L. A. Lawrence read a paper on Forgeries of Coins of Henry II, Eustace, son of Stephen, Henry, Bishop of Winchester, and the Empress Matilda. These coins, which formed two separate series, were shown to have been struck in part or entirely from identical dies, and also to have been struck over coins, which were not issued till considerably later than the period they purported to represent.

The Rev. R. S. Mylne described two medals of the Academy of St. Luke, Rome, bearing the portraits of Clement XIII and XIV. These had been awarded by the Academy to the writer's great-grandfather, Robert Mylne, F.R.S., who was the architect of Blackfriars Bridge erected in 1760.

The President announced to the meeting that the Council had awarded the Society's medal to M. Ernest Babelon, Conservateur des Médailles, &c., at the Bibliothèque Nationale, Paris.

JUNE 15, 1899.

ANNUAL GENERAL MEETING.

SIR JOHN EVANS, K.C.B., D.C.L., LL.D., Sc.D., F.R.S.,
V.P.S.A., F.G.S., President, in the Chair.

The Minutes of the last Annual General Meeting were read and confirmed.

Henry Platt Hall, Esq., was elected a Member of the Society.

The Report of the Council was then read to the Society as follows :—

GENTLEMEN,—The Council again have the honour to lay before you their Annual Report as to the state of the Numismatic Society, both numerically as well as financially.

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With great regret they have to announce the death of the following three Ordinary Members :—

T. W. Goodman, Esq.
G. Pearson, Esq.
Rev. John H. Pollexfen.

And of two Honorary Members :—

M. A. Chabouillet.
C. J. Rodgers, Esq.

Also the resignation of the following four Members :—

A. W. Hankin, Esq.
F. J. Haverfield, Esq.
W. Mayler, Esq.
Arthur Ricketts, Esq.

The names of Dr. Berkeley Martin, and A. Propert, Esq., have been erased from the list.

On the other hand, the Council have much pleasure in recording the election of the following ten Members :—

Harold Bolles Bowles, Esq.
Col. Gerald Boyle.
Major D. Lindsay, Carnegie.
William John Davis, Esq.
Henry Platt Hall, Esq.
William John Hocking, Esq.
Maurice Jónas, Esq.
Philip G. Laver, Esq.
John E. Pritchard, Esq.
M. Michel P. Vlasto.

According to the Report of the Hon. Secretaries the numbers of the Members are as follow :—

NUMISMATIC SOCIETY.

19

	Ordinary.	Honorary.	Total
June, 1898	269	23	292
Since elected	10	—	10
	279	23	302
Deceased	3	2	5
Resigned	4	—	4
Erased	2	—	2
June, 1899	270	21	291

The Council have further to announce that they have unanimously awarded the Medal of the Society to M. Ernest Babelon, Conservateur des Médailles et Antiques de la Bibliothèque Nationale, Paris, for his distinguished services to Numismatics, more especially in connection with the coinages of Syria and Persia, and the Roman Family series.

The Hon. Treasurer's Report, which follows, was submitted to the Meeting and adopted.

Statement of Receipts and Disbursements, of the
Dr. THE NUMISMATIC SOCIETY OF LONDON IN

	£	s.	d.	£	s.	d.
To Messrs. Virtue & Co., for printing <i>Chronicles</i> —						
Part II, 1898	37	1	0			
Part III, „	44	15	8			
Part IV, „	43	0	0			
Part I, 1899	36	5	0			
				161	1	8
„ The Autotype Company, for Plates	18	8	0			
„ „ „	4	12	0			
„ „ „	9	11	0			
„ „ „	23	14	2			
				56	5	2
„ The Royal Asiatic Society, one year's rent due June 24, 1899	30	0	0			
„ Mrs. Harper, for Attendance, Tea, Coffee, &c.	11	5	11			
„ Messrs. H. Bowyer & Co., for Bookbinding	5	4	3			
„ Messrs. Davy & Sons, for Printing	3	0	0			
„ Messrs. Hachette, for “Dictionnaire des Antiquités”	0	3	9			
„ Messrs. Walker & Boutall, for Photographing Coins	2	14	0			
„ Messrs. Hatton & Son, for Stationery and Receipt Books	1	6	6			
„ Mr. B. Quaritch, for Catalogue	1	5	0			
„ Mr. F. Anderson, for Drawing Coins	1	14	0			
„ Mr. Pinches, for Engraving	0	6	6			
„ Fire Insurance	0	15	0			
„ Secretaries, for Postages	5	0	0			
„ Treasurer, for Postages, Receipts, &c., and Cheque Book	7	14	0			
„ Collector (Mr. A. W. Hunt), for Commission and Postages	8	11	1			
By Balance in hand	228	10	9			
				<u>£524</u>	<u>17</u>	<u>7</u>

Examined with the Vouchers, compared as to additions, and found correct,

13th June, 1899.

W. C. BOYD
E. C. KRUMBHOLZ } *Auditors.*

Numismatic Society, from June, 1898, to June, 1899.

ACCOUNT WITH ALFRED EVELYN COPP, HON. TREASURER. *Cr.*

	£	s.	d.
By Balance from last Statement	181	15	11
„ Entrance Fees	11	11	0
„ Composition	15	15	0
„ Subscriptions	225	15	0
„ Amount received for <i>Chronicles</i> , viz.—			
Mr. B. Quaritch	£58	11	4
Mr. Thos. Bliss	0	14	0
		59	5 4
„ Mr. Philip Nelson, for Autotype Plate	3	12	0
„ Foreign Postages	0	2	0
„ August Dividend on £700 London and North- Western Railway 4 % Consolidated Preference Stock (less 9s. 4d. tax)	13	10	8
„ February ditto ditto ditto	13	10	8
		27	1 4

£524 17 7

ALFRED E. COPP,
HONORARY TREASURER.
13th June, 1899.

After the Report of the Council had been read, the President presented the Society's Medal to Mr. Grueber to forward to M. Ernest Babelon, who was unable to attend the Meeting, and addressed him as follows:—

Mr. Grueber,—

In the absence of M. Ernest Babelon, who I regret to say is unable to be present among us this evening, I must ask you to receive this medal on his behalf. It has been awarded to him in recognition of his distinguished services to numismatic science, more especially in connexion with the Roman Family series; the coins of the Kings of Syria and those of the Achæmenid Kings of Persia. His *Description historique et chronologique des Monnaies de la République Romaine, vulgairement appelées Monnaies Consulaires*, was published in 1885, and at once took its place as the standard work upon the subject, having accumulated in it all the knowledge that had been acquired since the appearance of Cohen's admirable *Médailles Consulaires*, which was published nearly thirty years before.

In the same manner M. Babelon's work on the coinage of *Les Rois de Syrie, d'Arménie et de Commagène*, which was brought out in 1890, at once superseded the earlier works upon these interesting and important series. His coins of *Les Perses Achéménides, les satrapes et les dynastes tributaires de leur empire, Chypre et Phénicie*, which appeared in 1893, occupy a similar unique position. Of late years M. Babelon has devoted his time and energies to preparing a summary catalogue of the magnificent collection formed by the late M. Waddington, which has now been added to the treasures of the Cabinet des Médailles, at Paris. This summary is now complete, and has been published in the *Revue numismatique*, of which M. Babelon has for many years been one of the editors. Of his valuable services in that capacity, and also as Conservateur of the Cabinet at the Bibliothèque Nationale, it is needless for me to speak; nor need I make more than a passing allusion to some

of his less voluminous works, such as *Les origines de la monnaie considérées au point de vue économique et historique*, all of which, however, are worthy of their author. I will only add that, in delivering the medal to him, you can assure him of the high estimation in which his labours are held by this Society, and of our earnest desire that he may long be spared to continue them, and add still further to the benefits which he has conferred on numismatic science.

Mr. Grueber, having thanked the Council on behalf of M. Babelon, for having conferred on him the Medal of the Society for 1899, and more especially the President for his complimentary remarks which accompanied the presentation, then read the following letter which he had received from M. Babelon:—

“BIBLIOTHÈQUE NATIONALE, PARIS,

“Le 23 Mai, 1899.

“CHER MONSIEUR GRÜEBER,—Je suis extrêmement flatté et presque confus de l'honneur insigne que veut bien me faire la Société de Numismatique de Londres, en m'offrant une médaille d'argent. Il lui eût été facile, certes, de trouver un numismate plus savant que moi et ayant rendu plus de services à notre science favorite. En vous chargeant d'être auprès de vos confrères l'interprète de ma très vive gratitude, je suis cependant contraint de vous dire qu'à mon grand regret il ne me sera pas possible de me rendre à Londres dans le courant de Juin pour recevoir la médaille. Je viens de faire un voyage dans les Pyrénées et en outre dans l'Est de la France, et en rentrant je me trouve accablé de travail. D'autres raisons, d'ordre administratif, m'empêchent aussi de pouvoir m'absenter de Paris avant le mois de Septembre prochain. C'est donc, croyez-le bien, avec un vif regret, que je suis forcé de renoncer à l'aimable invitation que vous voulez bien me faire et que je serai privé du plaisir de remercier de vive voix vos si aimables confrères.

Soyez, je vous prie, mon cher Monsieur Grueber, mon

interprète auprès d'eux, et venillez agréer l'expression cordiale de mes sentiments confraternels et tout dévoués.

"E. BABELON."

The President then delivered the following address:—

The Anniversary Meeting of the Society that we are this day holding, is one of considerable interest to me personally, for in April last I completed my fiftieth year as a member of this Society, and I this day complete the twenty-fifth year of my tenancy of office as your President. It is, in fact, a kind of bimetallic jubilee, golden as regards my membership, and silver as regards my Presidency. The roundness of the figures, half-a-century in the one case and a quarter-of-a-century in the other, adds a kind of mystic charm to the occasion, and suggests that in 1849 my fellow-members must have offered up some Romano-Hibernian vows in the form of SIC L. SIC XXV, which are now being fulfilled.

In looking back over the longer of the two periods, I feel how much I am indebted to the Society for aid in any numismatic work that I have been able to accomplish. The kind assistance of my colleagues, and the ready manner in which my somewhat numerous communications to the Society were accepted for publication, constantly afforded incentives to new work. Of the shorter period during which I have been your President, I can only say that my warmest thanks are due both to the Council and to the Society for their uniform consideration and support, and my gratitude is enhanced by the kind presentation, which I have reason to believe is about to be made to-day, of the medallion so artistically executed by Mr. Bowcher, which will, I trust, long be retained by my family as a memorial of my connexion with the Numismatic Society.

In 1849, our ordinary members numbered 106; and in 1854, when I became one of the Secretaries of the Society, we mustered but 82; while in 1859 we were reduced to 59 in

number. With the revival of the *Numismatic Chronicle* by taking it into the hands of the Society in 1861, the tide turned, and our number to-day is 270, which very closely approximates to the maximum that we have ever reached.

As you have heard from the Treasurer, our finances are in a satisfactory condition. The receipts from the sale of the *Chronicle* are fairly maintained, and the interest on our invested capital amounts to £28 per annum. In a retrospect over so many years, such as I have to make to-day, I cannot but feel how many more or less intimate numismatic friends I have both made and lost. I will not attempt to recall the names of those whom we shall no longer see among us, but I rejoice that there are at least two senior members of the Society to myself, still in the land of the living: Mr. James Cove Jones, who dates from 1843, and Mr. Jonathan Rashleigh, who joined the Society in 1848.

The losses that we have sustained by death during the past year are, I am happy to say, below the average, though some valued names have been thus removed from our list. Among our Honorary Members we have lost two, M. A. Chabouillet and Mr. C. J. Rodgers, with regard to both of whom I must say a few words.

M. Pierre-Marie-Anatole Chabouillet was born in Paris on July 18, 1814, and at an early age developed a taste for numismatic pursuits. Already in 1836 a folio volume on French medals from the reign of Charles VIII to that of Louis XVI, illustrated by numerous plates, was contributed by him to the *Trésor de numismatique et de glyptique*, and this was followed by two subsequent volumes in 1837 and 1846. His earliest communication to the *Revue numismatique* was in 1840, and his last in 1884. This was the funeral discourse, which he had pronounced at the tomb of M. Ernest Muret, with whom he had been associated at the *Cabinet des Médailles* for twenty-seven years. Muret had catalogued the 10,413 Gaulish coins described in his great work, which was posthumously published

in 1889, under the auspices of Chabouillet, who wrote an introduction to it. The bulk of Chabouillet's work, apart from the volumes contributed to the *Trésor*, consists of communications to various Journals. Of such memoirs and monographs, mainly on mediæval and modern coins and medals, Engel and Serrure record no less than 26, besides nearly 40 short articles and reviews. The *Numismatic Chronicle* was not, however, among the serials to which he contributed, though he was elected an Honorary Member of the Society in 1882. He retired from his post as Keeper of the *Cabinet des Médailles* in 1890, and was succeeded by M. Henri Lavoix, and subsequently by our medallist, M. Ernest Babelon. He died on the 5th of January last, in the eighty-fifth year of his age.

Our other Honorary Member, whose death we have to deplore, Mr. C. J. Rodgers, was elected an ordinary member of the Society in 1878, and was transferred to the Honorary list in 1896. He was born in 1838, in the small hamlet of Wilno Mills, Derbyshire, where his father was manager of a cotton-spinning factory, and was educated at local schools, in one of which he was a pupil-teacher, until he obtained by competition a Queen's Scholarship at the Borough Road College, London. There he remained two years, and was then appointed master of the National School at Fenstanton, Huntingdonshire. While there he was attracted to the study of Oriental languages, and managed to attend lectures at Cambridge on his favourite subjects. Ultimately, in 1868, he was sent out to India by the Christian Vernacular Education Society, in order that he might establish a Training College for native teachers. This he successfully accomplished at Amritsar, where he remained for twenty-two years as Principal of the College. During this period, he not only studied the Persian language and those of the district, but occupied himself with the history and archaeology, and especially the numismatics of India. His success in these studies was such that in 1886 he deserted college life, and was appointed Archaeological Surveyor of the Panjāb. As

I have already said, he became a member of this Society in 1878, and in 1882 he communicated a paper to our Journal, "On some Coins of Nādir Shāh struck in India." The only other paper from his pen that we have published, is on two coins from the Panjāb, one being of a new King Polyxenus; and a short note that appears in the forthcoming Part of the *Chronicle*. But these papers afford no gauge of his numismatic activity, for between 1871 and 1897, he communicated some thirty papers to the Bengal Asiatic Society on Sikh, Durrāni, Kashmir, Kangra, Delhi, and other coinages. Moreover, he published two voluminous catalogues of the coin collections in the Museums of Lahore and Calcutta. Unfortunately, the post of Archæological Surveyor was from economic motives suppressed, and of late years, with failing health, he had to undergo hard struggles. Eventually, he was appointed Secretary to the Religious Book Society at Lahore, but held the post for a short time only, as he died there in November last. In him the world has lost an accomplished Persian scholar and a devoted Indian numismatist. I have only to add that I am indebted to Dr. Codrington for most of the particulars of his career.

From among our ordinary members we have lost by death Mr. T. W. Goodman, Mr. George Pearson, and the Rev. J. H. Pollexfen. Neither of the two former contributed to our Proceedings, but we owe Mr. Pearson a debt of gratitude, inasmuch as he was good enough to place in my hands for description an interesting hoard of upwards of 480 Roman coins found upon his estate of Brickendonbury, near Hertford, in 1895.

In old times the Rev. John Hutton Pollexfen was a frequent attendant at our meetings, and from 1862 to 1870 was several times a member of our Council. He was born in the year 1818, and in 1835 took the degree of Doctor of Medicine in the University of Edinburgh. He subsequently entered at Queen's College, Cambridge, where he graduated in 1843. In the following year he was ordained by Dr. Longley, then Bishop of Ripon, and in 1848 became Secretary of the Pastoral Aid

Society, remaining in office for three years. He became Rector of the Parish of St. Runwald, Colchester, in 1851, and it was in that historic town that his numismatic tastes were developed. He joined this Society in November, 1861, and for the next ten years brought from time to time rare and interesting coins for exhibition at our meetings. In December, 1864, he communicated an important paper on a hoard of gold ornaments and silver coins found in Bute, the latter being of Henry I and Stephen, and of David I of Scotland. Another of his papers, published in 1868, is on two new Scottish pennies of James VI and Charles I, with some remarks on their half-groats and on the Thistle crown of James I. In 1874 Mr. Pollexfen was appointed to the living of Middleton Tyas, near Richmond, Yorkshire, where he spent the remainder of his days, and on leaving Colchester he most liberally made over to me the coins of the ancient Britons that he had been able to collect during his residence on the site of Camulodunum. In 1881, Mr. Pollexfen was elected a Fellow of the Society of Antiquaries of London, having already, in 1863, exhibited some interesting Roman antiquities at one of their meetings. These are figured in the *Archæologia*. He was also an occasional exhibitor at the meetings of the Royal Archæological Institute and the British Archæological Association. He died at Middleton Tyas, on June 8, and in him I have lost an old and valued friend.

Dr. W. Frazer, of Dublin, though not a member of the Society, was a frequent contributor to the pages of the *Chronicle*. Of these I may mention a short note on the shillings of George III, which was published in 1882. Fourteen years later he favoured us with an account of a bronzo medallion on the delivery of Antwerp in 1577, a piece of great historical interest, and at the same time he gave us a note on a Nuremberg counter which he was inclined to regard as connected with the Massacre of St. Bartholomew. Other papers followed, in 1897, on three rare medals by W. Mossop, and on a medallion in plaster of the Rt. Hon. John Beresford and his wife. He was an

active Fellow and Vice-President of the Royal Society of Antiquaries of Ireland, and an Honorary Fellow of the Society of Antiquaries of Scotland. He was also a Member of the Royal Irish Academy from 1886, and was distinguished in medicine as well as in archæology. He died in April last.

During the past year we have had under consideration an unusually large number of papers relating to the very important subject of Greek numismatics.

Our distinguished Honorary Member, M. J. P. Six, has given us a second portion of his essay on unedited and uncertain Greek coins, the first portion of which was mentioned in my anniversary address of last year. I must content myself with brief allusions to a few of the more important suggestions made by the author. One of them is that the portrait—for as such it has been recognised by Canon Greenwell and others—on a well-known Cyzicene, is that of the Athenian general, Timotheos, who in B.C. 368 raised the siege of Cyzicus by the Persians. M. Six is inclined to connect the Cyzicenes bearing the inscription ΕΛΕΥΘΕΡΙΑ with the same occasion. It is satisfactory to find that there is a hereditary interest in coins in the family, as the suggestion of the name Timotheos comes from M. J. Six, the son of our member.

An important discussion of some Lycian coins occupies a considerable part of the paper, followed by an attribution of certain coins to Antigonus as King of Babylon, but the concluding part, in which the relations of certain coins of Antiochus I and II, Seleucus and Antiochus Hierax to each other is examined, will also be found of great value. He considers that the coins of Hierax are contemporary with those of Seleucus II, and that the portrait of Antiochus III can in all cases be distinguished from that of Hierax.

M. J. P. Six, in another memoir entitled Rhégium-Iocastos, has disputed the view of Mr. Seltman and Mr. Head as to the seated figure on the reverse of the silver coins of Rhégium being “a divinity of the nature of Agreus or Aristæos.” But, while

agreeing that it can hardly be regarded as a personification of the *Demos* of the place, he regards it as being the founder or *oikistēs* Iocastos, and as coming within the same category as Taras and Hercules on the coins of Tarentum and Crotona. He even finds the serpent, from the bite of which Iocastos died, represented in the act of attacking him upon one of the coins, and as an accessory on others, while in some cases he perceives an agonised expression on the face of the King. He also regards the standing figure on the reverse of some of the bronze coins of Rhegium as representing the deified monarch. Mr. Seltman has lost no time in replying to M. Six, and gives his reasons for not regarding the figure as that of the oekist, and, while maintaining his original opinion, is unable to recognise upon the coins either the serpent or the agonised expression on which M. Six relies. The adjuncts on the coins he considers to be accessory to the main type, and not merely symbols of successive magistrates or issues. I cannot pretend to enter into a discussion of the value of the arguments adduced on either side by such competent and friendly disputants, and must leave it for time to determine which of them is in the right.

Dr. Weber, or, as I am happy to think we may now salute him, Sir Hermann Weber, has given us an account of a small hoard of coins, principally of Mende, found in Macedonia. The types of the coins of that town are as usual mainly connected with the worship of Dionysos and Silenos, and the coins, some of which offer new varieties, date from the fifth century B.C. A few coins of the neighbouring towns of Potidæa and Scione were present in the hoard, as well as some uncertain coins of Macedonia. The author adds some remarks with regard to other coins of Mende in his collection, including three tetradrachms.

Continuing a most laudable custom, Mr. Warwick Wroth has given us notices of the principal Greek coins acquired in 1897 and 1898, by the British Museum. The total number of additions during 1897 was 836, being more than in any one of

the ten previous years. A large proportion of them were purchased at the sales of the Bunbury and Montagu collections. Among the most interesting pieces may be mentioned an early and unique Æginetic didrachm of Delphi, bearing on the obverse a ram's head and probably ΔΑΛΦΙΚΟΝ, with an incuse square containing four compartments on the reverse; a heavy gold stater of the class attributed to Cræsus, King of Lydia; and a remarkable gold coin of Ephesus, which seems to be assignable, not, as Mommsen supposes, to the days of Sulla, but to the slightly anterior period when Ephesus was in rebellion against the Roman power. Other coins might be mentioned, such as one of Rhæmetalces of Bosphorus, which from its date suggests that Cotys II and he were for a short period joint rulers of that country; and a unique gold coin of Rhodes.

Some remarkable silver coins of early date, one of them with a toad as the obverse type, and another with the head and neck of a bull, are unfortunately of uncertain attribution.

The acquisitions in 1898, were even more numerous than those in the previous year, amounting in all to 924 pieces, of which, however, only two were in gold, and 222 in silver. Both the gold coins, though not unique, are of great rarity and importance. One of them, of Tarentum, is of extreme beauty as a work of art. It bears the head of Demeter veiled on the obverse, and on the reverse is the child Taras in an attitude of supplication to his father Poseidon. My son has suggested that this device typifies an appeal of Tarentum to its Spartan fatherland, represented by Poseidon; and has dated the coin about B.C. 340; but Mr. Wroth would somewhat doubtfully refer it to a rather later date, or to the time of Alexander of Epirus, B.C. 334. The second gold coin is one of the rare hexadrachms of Carthage, of which specimens have been described by Müller and others.

Among the other coins may be cited one in bronze of ΣΑΠΙ, probably a Scythian dynast who had a mint on the eastern shore of the Euxine; another of King ΑΙΛΙΟΞ; who has also

been supposed to be a Scythian dynast; early coins of Paros and Temnus, the latter presented by Mr. Alfred J. Lawson, and a cistophorus of Pergamum, giving the name of a new magistrate, Kausilos. An early fourth-century tetradrachm of Samos also gives a new name, that of Moiriades. Most of the bronze coins belong to Imperial times, but among them is a rare coin of Tiraëus II of Characene, presented to the Museum by our member, Mr. H. F. Amedroz. Such is but an imperfect sketch of the additions to the National Collection; but I venture to think that the Society, as representing no inconsiderable part of the British public interested in numismatics, may congratulate both the Museum and itself on such important accessions.

Mr. George Macdonald, as to whose new catalogue of the coins in the Hunter collection I shall subsequently have to say a few words, has communicated to us a paper on the legend **IATON** on coins of Himera. From it, it appears that all the speculations as to the meaning of this mysterious legend in which for the last forty years scholars and numismatists have indulged, have been absolutely vain, inasmuch as the legend is not **IATON** at all, but **ΞΟΤΗΡ** retrograde. At all events, this holds true with regard to the majority of the six coins on which the legend was supposed to occur, four of which are from the same die. The other two afford at the best but doubtful testimony.

Mr. S. M. Alischan, of Constantinople, has called attention to a small silver coin in his possession, which he assigned to Posidium, in Cassiotis, south of the mouth of the Orontes. The types are, on the one face, bearded head of Odysseus, and on the other a seated figure of Baal. Mr. G. F. Hill, in some further remarks upon this interesting coin, confirms the attribution to Posidium in Syria, though just on the borders of Cilicia, but shows cause why the bearded head wearing a pillion may after all not be that of Odysseus, but more probably that of one of the Cabiri.

M. Paul Perdrizet, a well-known student of the French

School of Archæology at Athens, has called our attention to an inscription apparently brought from Cyzicus to Constantinople, and relating to Antandros in Troas. The inscription itself is, however, probably of Ionian origin, and on the stone above it is the figure of a goat, the emblem or armorial bearings of the city of Antandros, which, as M. Perdrizet shows, occurs also on the coins of that city. It is sometimes represented as standing before a fir-tree, but, as Mr. Wroth says, the type has not as yet been satisfactorily explained. Both the inscription and the coin selected in illustration of it, date from the fourth century B.C.

Mr. H. B. Earle Fox has obliged the Society with a list of some of the more important Greek coins in his collection, some of which are of great rarity. One of them, of Coroneia, in Bœotia, appears to offer a new variety, as does likewise a coin of Carystos in Eubœa. The author's proposed transference of a copper coin reading ΛA or $A \Lambda$ retrograde, from Lacedæmon to Elis, seems worthy of consideration.

A review by my son, Mr. Arthur Evans, of Dr. Holm's work on the coinage of Sicily, almost takes rank as an original contribution on Sicilian numismatics. Mr. Hill also deserves our best thanks for his useful bibliographical notes on Greek numismatics.

The communications on the subject of the Roman coinage during the past twelve months have not been numerous.

Mr. G. F. Hill, however, has given us details of a hoard of Roman aurei from Pudukota, in South India, the Rajah of which territory kindly presented to the British Museum such pieces in the hoard as were wanted for the national collection. The total number found was 501, ranging in date from the days of Augustus to those of Vespasian. The whole of the coins, without exception, were much worn and in bad condition, and, moreover, no less than 461 were intentionally defaced by a chisel or file-mark across the head. Mr. Hill considered that they were thus marked by some political authority as being

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too much worn for further circulation; but Mr. Theobald has subsequently suggested that the coins at some time passed through the hands of a fanatical Muhammedan, who defaced the "idols" upon the coins. Mr. Hill does not accept this solution of the question, though he now inclines to the view that some native had them defaced, as he objected to symbols of Roman sovereignty circulating in his dominions. A remarkable feature in the hoard is the preponderance of the aurei of Tiberius, with the reverse PONTIF. MAXIM., of which 161 were present. As has been pointed out by Mr. Thursten, this same type in silver was a great favourite in the Coimbatore district, as was also that of Augustus with Caius and Lucius as Cæsars on the reverse, of which type there were 22 in the Pudukota hoard. The silver coins of this latter type found in India are almost always plated, and Mommsen has suggested that they were specially struck for trade with Southern India. There certainly seems reason to believe that, as at the present day with Maria Theresia dollars, and in former times with the tetradrachms of Athens, when a foreign currency is introduced among a semi-civilized people, there is considerable advantage in its presenting some definite uniform type.

Our attention has again been called to the picture of a Roman mint in the house of the Vettii at Pompeii, but this time by Mr. Seltman, and not by Mr. Telford Ely. From a careful study of a good photograph, the former arrives at conclusions somewhat differing from these of the latter. It is needless to enter into details, as to which possibly neither account may be absolutely correct, but the main novel feature in Mr. Seltman's interpretation of the picture is that he regards the principal personage in it, not as a Monetalis, but as Jnno Moneta herself, represented as a winged divinity, and having the eyes from the tail of her sacred bird, the peacock, transferred to her wings.

Papers relating to the Anglo-Saxon coinage have been but few in number. Mr. Grueber has, however, called our attention to one of these remarkable pennies of Aethelred II, with the

Agnus Dei on the obverse, of which nearly all the known examples are in Swedish or Danish cabinets. The specimen that he exhibited was struck at Derby, and found in London, and is in the collection of Mr. F. G. Hilton Price. Mr. Grueber has also read a paper on a penny of Eadgar, with what has been regarded as a mitre on the reverse, and a unique halfpenny of the same King struck at York, and bearing a rose-branch on the reverse. Both these coins are in the British Museum.

In the English series Mr. Grueber has described from the same collection a noble of the annulet, or first coinage of Henry VI, which fills a recognised gap in our gold coinage.

Mr. Lawrence has described a hoard of groats of late Plantagenet and Tudor times which, by the relative preservation of the coins, seems to confirm the sequence of mint-marks of Edward IV and Henry VII that he had already advocated.

In conjunction with Mr. W. J. Andrew and Mr. Grueber, he has discussed the question whether, for some time before and after the Norman Conquest, the dies used at country mints were engraved locally or obtained from a common centre in London. The general result seems to be that, from the reign of Aethelred II down to modern times, the dies, with but rare exceptions, were prepared in London, and thence supplied to the mints throughout the country.

Another and very important paper by Mr. Lawrence relates to forgeries of coins of Henry I, Eustace son of Stephen, Henry Bishop of Winchester, and the Empress Matilda. It seems to me that the evidence in favour of his conclusions is distressingly overwhelming, and that many examples hitherto accepted as genuine must now be discarded as false. The production of several of them may date from the last century, but when the same die has been used for the striking of coins purporting to be of different monarchs, and when these coins have been overstruck on others belonging to a long subsequent date, it is hard to see how their authenticity can be substantiated.

Mr. R. Ll. Kenyon, in a paper on the Shrewsbury Mint and its officers under Henry III, has shown us the light that can be thrown by contemporary documents on the history of the English coinage. He has found, among the Borough records at Shrewsbury, documents which give not only the amount of money coined at that mint during 1248 and 1249, but the names of the moneyers and assayers. The general conclusion is that the mints were worked entirely by local men under the authority of the Exchequer Court, but that the dies were made in London, where also the accounts of the mint were checked and the coins tested. The paper, however, must be read to appreciate all its bearings.

Mr. Pritchard, in like manner, has made good use of the documentary evidence preserved in the Archives of Bristol, and has shown that leaden tokens were issued in very large numbers at that city so early as 1578 and the following years, and formed the principal minor currency of the district. The better-known copper tokens of the seventeenth century were issued until 1679, or for some years after the general suppression of local issues.

Dr. Philip Nelson has supplied us with an interesting and exhaustive essay on the Coinage of the Isle of Man, in which not only the coins expressly struck for circulation in the island are described, but also various other pieces which, at one time or another, had currency there, and various tokens, either connected with the island or bearing upon them the badge or crest of the Stanley family. After some account of the history of the Isle of Man, the author traces the presumed origin of the Triskeles, and cites instances of its occurrence on Greek coins. Is it not possible that the so-called trefoil-shaped ornament on the pennies of the Northumbrian Regnald and Anlaf may have a closer connection with the type of Man than has hitherto been recognised? The attribution of the FLOREAT REX coins to 1678 seems tenable, especially when we consider the insertion of a central plug of a different metal

in the coin, a peculiarity which may be seen in other coins of the seventeenth century. The prevalence of the form GESSE-RIS over IECERIS in the early issues of the Manx coins is very remarkable, and can hardly have been the result of ignorance. It seems rather suggestive of the triquetra, as shown on the coins, having been originally worn as a badge. "Whichever way you wear it, it will stand," is by no means a bad motto, but the idea of throwing the three-legged figure to the ground in the expectation that it will stand, may be of later introduction, and seems to leave out of sight the possibility of its falling flat. There are one or two statements in the paper, quoted from former writers, which I venture to think will require revision. One is, that the Duke of Albany, in 1324, "struck a gold piece for insular use, bearing an impression of the arms of the island." As it was not until 1344 that Edward III issued the florin, to be shortly followed by the noble, I can hardly accept the view that in the matter of the currency the Isle of Man was twenty years in advance of London. The issue of copper coins in 1329 by the Scottish Governor also requires verification. Our first authorized English copper coinage dates from 1672.

It is but rarely that papers relating to mediæval or modern Continental coinages appear in the pages of the *Chronicle*, but that by Mr. C. R. Peers, on the Swiss Bracteates in the British Museum, forms a welcome addition to our subject-matter. It is not only of general interest, as giving a comprehensive account of the origin and development of these curious one-sided flimsy pieces of metal, in some instances hardly thicker than a new bank-note, but it has the special merit of relating to an important series, forming part of our National Collection. If the date on one of the coins of St. Gall has been correctly read as 1424, it affords the earliest instance at present known of the use of Arabic numerals for dates on coins.

Another paper relating to a foreign coinage is that by Mr. Krumbholz on the recent issues of French coins in gold, silver, and copper. Elegant as the designs on these pieces may be, it

seems to me that they are wanting in the first requisites for a currency in constant use. The low relief and the indistinct outlines are so ill-adapted to withstand ordinary wear and tear, that it will not cause me much surprise to learn that these pieces have been withdrawn from circulation.

The medals of the Academy of St. Luke, struck in Rome during the last century, and awarded to Robert Mylne, F.R.S., the architect of Blackfriars Bridge, which were exhibited to us at our last meeting by his great-grandson, come under quite a different category as specimens of medallic art.

In the Oriental department of the Society, not very much has been accomplished, though our excellent Librarian, Dr. Codrington, has supplied us with a paper on the coins of the Bahmani Dynasty. This series was discussed in the *Chronicle* in 1881, in an article by Mr. Gibbs, who has given a good summary of the history of the dynasty which reigned in the Deccan for about a century and three-quarters, beginning with A.D. 1347. Thanks to the study of various collections since the publication of Mr. Gibbs's paper, Dr. Codrington has been able to describe and figure a considerable number of new coins, and to do much to remove difficulties that have arisen as to the genealogy and succession of some of the rulers, especially the fifth, whose name appears to have been Muhammad, and not Mahmūd, and the twelfth, Nizām Shah, who appears to have adopted the name of Ahmad on or after his accession.

Dr. M. A. Stein has supplied us with an exhaustive paper on the monetary system of ancient Kashmir, being in the main a commentary which he has prepared to accompany his translation of the earliest Sanskrit chronicle extant, the *Rajatarangini* of Kalhana. It would be out of place here to attempt to give a *résumé* of the paper, which enters very fully into the ancient designations and proportionate values of the coins which went to make up the Kashmir currency, the lowest unit of which, the *Dinnāra*, was the $\frac{1}{100}$ th of a rupee. A *crore*, that is to say, ten millions of *dinnāras*, was equal to no more

than 2,500 rupees. Co-existent with a metallic currency, there seems to have been one of various natural products, such as rice and other grain. So recently as 1889, Mr. Lawrence, the late Settlement Commissioner, was requested to take his own salary and those of his department in oil-seeds. It is curious to find the Roman denarius surviving in such a diminutive form as the dīnnāra; and, more remarkable still, that in Kashmir dīnnāra should be the term for money in general, in the same way as danāri in Italian, and "dinero" in Spanish.

So much with regard to the Papers which have come under our notice. As to the exhibitions at our meetings, I am glad to think that they have fully sustained their variety, importance, and interest. They are of vital assistance to the Society, both as giving opportunities for the inspection of rare coins and medals, and as aiding to promote friendly intercourse among our members. I may mention one exhibit in particular—the album of autographs of numismatists of sixty years ago, and that of portraits of numismatists from the sixteenth century onward, which were laid before us by the Rev. F. Binley Dickinson.

I must now say a few words with regard to the numismatic publications of the past year.

In Greek numismatics, the most important event of the year is the beginning of the Corpus of Greek coins with the *Coins of Northern Greece*, published by the Berlin Academy of Sciences, under the general direction of Dr. Imhoof-Blumer. The task of editing the coins of Dacia, Moesia, and Thrace has fallen to Dr. Behrendt Pick, of Gotha, and the first half-volume contains descriptions of 2,108 varieties of the coinage of Dacia, Moesia Superior, and part of Moesia Inferior. To each description is attached a bibliography of all previous publications of the coin concerned, in which the examples of which the existence is verifiable are distinguished from others only known from older publications. There are twenty plates (which will serve for the complete volume) and admirable introductions.

The whole work is a monument of scholarly industry, and marks a fresh epoch in the study of Greek numismatics.

In my Address of 1897, I mentioned the fact that, through the liberality of Mr. Stevenson of Glasgow, the world was soon to see a new catalogue of the Hunterian collection of coins, corrected and brought up to date by Mr. George Macdonald. The first volume of this catalogue has now appeared, and justifies the favourable anticipations that had been formed of it. It embraces the coins of Italy, Sicily, Macedon, Thrace, and Thessaly, and is illustrated by thirty autotype plates. The catalogue itself has been formed with all care and critical discrimination, and the history of the formation of the collection, compiled from Dr. Hunter's own memoranda, gives an additional charm to the volume. This is not the place to discuss its details, but all numismatists will feel grateful both to Mr. Macdonald and to Mr. Stevenson.

The Trustees of the British Museum have issued another volume of their Catalogue of Greek Coins, this time compiled by Mr. Warwick Wroth. It relates to the coins of Galatia, Cappadocia, and Syria, and has a valuable Introduction, extending over more than seventy pages. It is illustrated by a map and 38 autotype plates, and in many cases indications are given as to the sources from which the coins have been obtained, as for instance, from the Northwick or Bunbury collections. As usual, excellent indexes are given. From the point of view of Greek art this volume is much less interesting than many of those which have preceded, the proportion of autonomous coins being but small to those of Imperial times. The series of coins of the Kings of Cappadocia, Commagene, Galatia, &c., are, however, of great importance.

All admirers of the beautiful series of Renaissance Medals, produced for the most part in Italy during the fifteenth and sixteenth centuries, will hail with satisfaction the appearance of Supino's *Medagliere Mediceo del Reale Museo nazionale* at Florence. Some little account is prefaced of the origin and

history of this collection, which was commenced by Lorenzo the Magnificent, and continued under other members of the Medici family. The catalogue extends to 890 numbers, and some of the medals were unknown to Armand, Friedländer, and Heiss. It is interesting to find among them a reproduction in gold of the medallion by Pisano, of John Palæologus, which was presented to Cosmo III in 1715 by Sir Andrew Fountaino, whose own medal by Dassier, struck just thirty years later, is one of the best of that artist's productions. Signor Snipino's book is illustrated by fifty-six excellent photographic plates, and the arrangement of the medals is : 1st, under Italian artists whose names or ciphers are known ; 2nd, under unknown artists ; and 3rd, artists of other nations than Italy. Among these last we find the name of Jean Perreal, painter to Louis XII, who furnished the design for the beautiful Lyons medal of 1499, though its execution was carried out by two French goldsmiths.

I fear that I have detained you almost too long with this review of the past year. The details into which I have had to enter show, however, that the Society retains its full vitality, and I can now conclude with the expression of a devout hope that, for many years to come, it may still continue to live and prosper.

In proposing the vote of thanks, Mr. Rashleigh said that he had been entrusted with the great privilege of proposing a vote of thanks to their President for his very able address. He scarcely knew whether this privilege had been granted to him because of his seniority as a member of the Society, to which the President had alluded, or because of the long friendship which had existed between the President and himself for upwards of fifty years. That friendship had indeed been a golden union, and one which set a good example to every married life ; for during this long period they had not had one quarrel—no jealousy and no disputes—not even about coins.

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There were, however, other reasons which made him feel proud that this pleasant duty had been entrusted to him. The address to which they had just listened was one of the many similar addresses which had been delivered annually during the twenty-five years for which Sir John Evans had been President of the Society. These addresses he regarded as so many links which made up, so to speak, a chain of numismatic science. It was impossible to over-estimate what they had done from year to year, to illustrate and to create an interest in the study of numismatics. There could be no doubt whatever that they had helped greatly to popularise the study of coins, and had shown to the world that numismatists were not altogether so many selfish collectors, each intent on increasing his own collection, but were students whose information could be brought to bear on topics of interest of every kind. He himself, owed practically all the knowledge of English history he possessed to the study of coins. In cases like this, coins acted as a sort of *memoria technica* and impressed events on the mind in a way which perhaps nothing else could.

There could be no doubt, then, that the attractive form in which the President had arranged and summarised so much knowledge in these annual addresses, had added greatly to the general interest in numismatics, and this fact was shown, in a practical manner, by the large increase in the members of the Society. As an instance of the care which the President always bestowed on this work, and of the interest which he created in all, he would refer to one part only of the address, and that the part which might generally be regarded as the saddest—the obituary notices. These were such admirable summaries of a man's life and work that it was almost an inducement held out to them to hope that some day—always supposing that such a President filled the chair—they might themselves become the subject of similar notices, and have such accounts of what they had done that they would scarcely know themselves.

It was indeed a privilege to hear such addresses; but with-

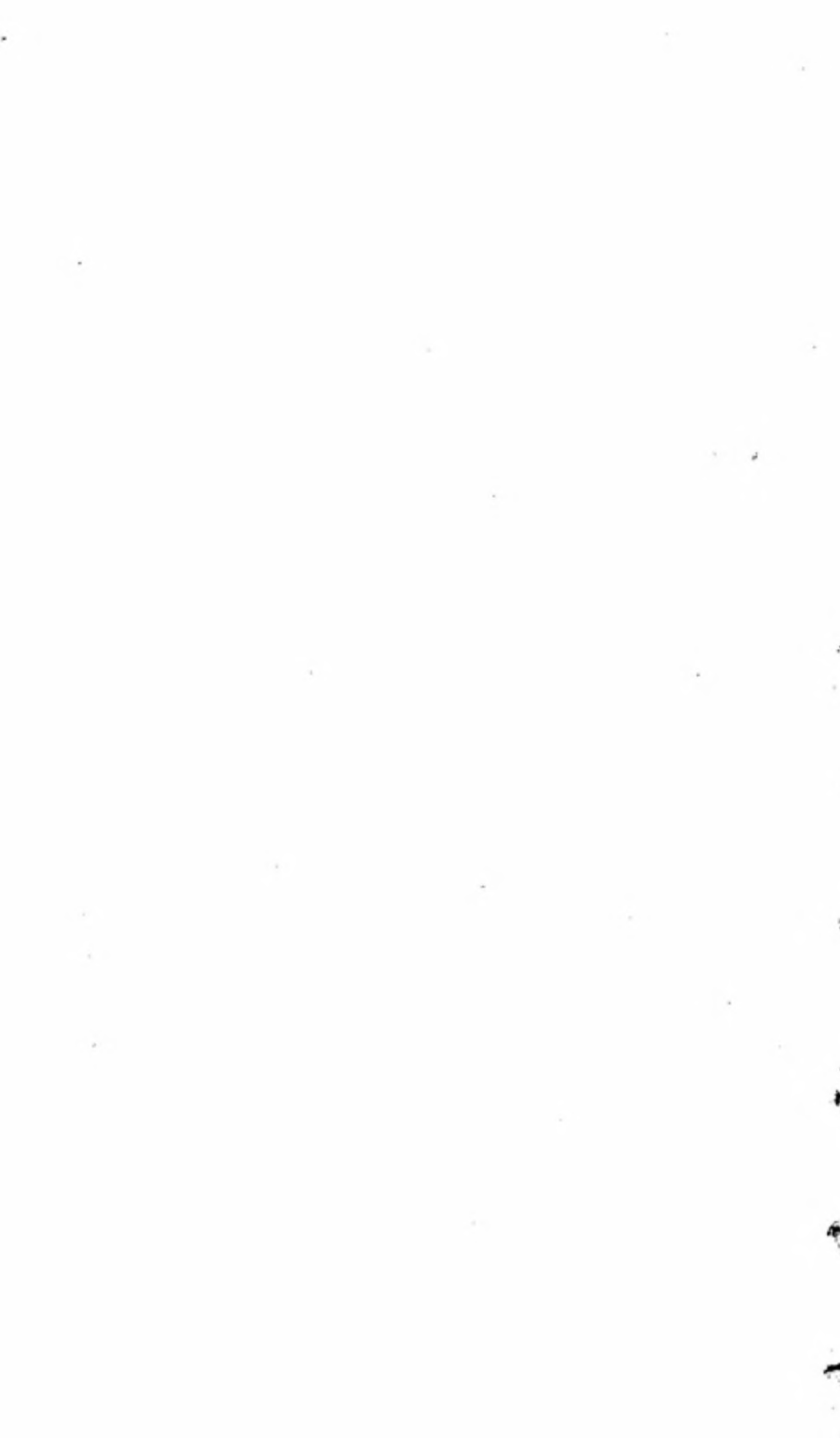


F. BOWCHER FEC.

PORTRAIT MEDALLION

PRESENTED TO SIR JOHN EVANS, K.C.B.,
PRESIDENT OF THE NUMISMATIC SOCIETY.

(HALF-SCALE OF ORIGINAL.)



out going any further into the various particulars which made them interesting, he would sum up everything by saying that they were so, because they were a reflex of the President's own mind. "If you visit him at his house, you find yourself entertained with a perfect museum of antiquity and art; if you talk to him, you find in his conversation a perfect encyclopædia. Everything with which he deals he fills with interest."

In conclusion, Mr. Rashleigh expressed the hope that the Society might have the benefits which the President conferred on it for many years to come.

In seconding the vote of thanks to the President, and in presenting him, on behalf of the Council, with a portrait medallion,¹ commemorating his fifty years' membership of the Society, Sir Hermann Weber said that he most cordially endorsed every word which Mr. Rashleigh had spoken. Though he could not express these thoughts as Mr. Rashleigh had expressed them, he felt glad at least that he was able to add something to what had been already said. He had been asked, in the name of the Society, to convey its sincerest congratulations to its honoured and beloved President, on the completion of his fifty years' membership; and at the same time to present to him, on behalf of the Society, a medallic portrait of himself. This had been executed by Mr. Frank Bowcher, who had most generously given it to the Society. It was a most admirable piece of work, and, as a gift from the Society to its President, it was a token of that bond of sympathy which united them.

It was, indeed, difficult to estimate the eminent position which the President held, whether in numismatics or in so many other lines of study. He believed he was correct in saying, that it was, first of all, as a geologist that the President became interested in the stone implements and coins which were discovered in the earth. His various papers, communicated to

¹ The medallion is figured on Pl. XI.

the *Numismatic Chronicle*, on these coins, had led up to his great work on *The Coins of the Ancient Britons*, of which the chief characteristic was, that it showed how the different types of British coins could be attributed to the different districts. In a truly Darwinian manner he had traced the origin of these types, and had shown that order prevailed in what had before seemed to be chaos.

During Sir John's Presidency of the Society their journal, the *Numismatic Chronicle*, had become the foremost of the numismatic journals of Europe. Doubtless he had had excellent assistants, but they had owed much of their inspiration to him, and his own articles were, perhaps, the most characteristic feature of the journal.

Of the many distinguishing qualities of their President, he knew not which to admire most—his scientific work, his regularity of attendance at their meetings (and this in the case of one so much occupied was most remarkable), or the judicious remarks which he invariably made on every subject of interest which was brought forward. These qualities had not only inspired them in their work, but had gained for him their warm affection.

It was, therefore, with the greatest pleasure that the Society took this opportunity of showing their President some token of the esteem in which he was held. They must not forget too, that indirectly there were other debts which they owed to him. Lady Evans had honoured them with her constant attendance, and another member of his family—whose name he need not mention, and who, in his great gifts as a scholar and investigator, both in numismatics and in other studies, rivalled his father—was an active member of their Society and a frequent contributor to their Journal.

In conclusion, he would repeat the wish that Mr. Rashleigh had expressed, that the President might retain for many years the wonderful energy which distinguished him, and the keen interest which he took in so many branches of learning, and

that he might for a long time be spared to hold the position of President of the Society. Every numismatist would sincerely repeat this wish.

Sir John Evans cordially thanked Mr. Rashleigh and Sir Hermann Weber for the kind way in which they had proposed the vote of thanks to him and made the presentation. They had done so in terms which were most acceptable to himself, and, he was pleased to know, acceptable also to the members of the Society. Mr. Rashleigh was certainly right in supposing that they were numismatic friends even before 1849. He even thought it extremely probable that he was proposed as a member of the Society by Mr. Rashleigh.

In those days their Society was much smaller, and their aims, no doubt, somewhat more restricted than now; there were, however, excellent numismatists even then, whose names it was somewhat melancholy to recall, as they had passed away.

It was a great satisfaction to him that he had been able for so long a period to take an active part in the affairs of the Society. He was glad to have been able to keep the *Chronicle* going; and, in his work as editor, to have had such able assistance as had been given by Mr. Head and Mr. Grueber, and indeed at all periods by the Museum staff.

He was glad now, too, to accept the beautiful specimen of the numismatic art which the Society offered him. Mr. Bowcher had indeed done the best with his subject, and the general opinion was that he had produced an excellent portrait.

With regard to the meetings of the Society, he ventured to think that they were more friendly in tone than was always the case with learned societies. Their discussions were always amicable, and their meetings were enlivened by exhibitions of interesting objects, which did much to bring members together and promote a friendly feeling.

He expressed the hope that he might still be spared for some years to hold the position which he had held so long.

The President then announced to the meeting the result of the ballot for the Council and the Officers for the ensuing year, which was as follows :—

President.

SIR JOHN EVANS, K.C.B., D.C.L., LL.D., Sc.D.,
F.R.S., V.P.S.A., F.G.S.

Vice-Presidents.

BARCLAY VINCENT HEAD, Esq., D.C.L., Ph.D.
SIR HERMANN WEBER, M.D.

Hon. Treasurer.

ALFRED E. COPP, Esq.

Hon. Secretaries.

HERBERT A. GRUEBER, Esq., F.S.A.
EDWARD J. RAPSON, Esq., M.A., M.R.A.S.

Foreign Secretary.

GEORGE FRANCIS HILL, Esq., M.A.

Librarian.

OLIVER CODRINGTON, Esq., M.D.

Members of the Council.

W. J. ANDREW, Esq.
W. C. BOYD, Esq.
REV. G. F. CROWTHER, M.A.
ARTHUR J. EVANS, Esq., M.A., F.S.A.
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RICHARD A. HOBLYN, Esq., F.S.A.
SIR HENRY H. HOWORTH, K.C.I.E., M.P., F.R.S.,
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L. A. LAWRENCE, Esq.
AUGUSTUS PREVOST, Esq., B.A., F.S.A.
F. PARKES WEBER, Esq., M.D., F.S.A.

LIST OF MEMBERS
OF THE
NUMISMATIC SOCIETY
OF LONDON.

DECEMBER, 1899.

LIST OF MEMBERS
OF THE
NUMISMATIC SOCIETY
OF LONDON,
DECEMBER, 1899.

*An Asterisk prefixed to a name indicates that the Member has compounded
for his annual contribution.*

ELIOTED

- 1873 *ALEXÉIEFF, M. GEORGE DE, Chambellan de S.M. l'Empereur de
Russie, Ekaterinoslaw (par Moscou), Russie Méridionale.
- 1892 AMEDROZ, HENRY F., Esq., 7, New Square, Lincoln's Inn, W.C.
- 1882 ANDREW, W. J., Esq., Cadster House, near Whaley Bridge,
Derbyshire.
- 1884 ANDREWS, R. THORNTON, Esq., 23, Castle Street, Hertford.
- 1888 ARNOLD, G. M., Esq., D.L., F.S.A., Milton Hall, Gravesend,
Kent.
- 1882 BACKHOUSE, J. E., Esq., The Rookery, Middleton Tyas,
R.S.O., Yorks.
- 1881 BAGNALL-OAKELEY, Mrs., Newland, Coleford, Gloucester-
shire.
- 1892 BAKER, F. BRAYNE, Esq., The College, Malvern.
- 1898 BAKER, WM. CLINTON, Esq., J.P., Bayfordbury, Herts.
- 1898 BANES, ARTHUR ALEXANDER, Esq., The Red House, Upton,
Essex.
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- 1898 BLANCHET, M. J. A., 164, Boulevard Pereira, Paris.
- 1891 DANNENBERG, HERR H., N.W., Lessingstrasse, Berlin.
- 1899 DROVIN, M. EDMOND, 11, Rue de Verneuil, Paris.
- 1898 DRESSEL, DR. H., Münz Kabinet, K. Museen, Berlin.
- 1899 GABRIOT, PROF. DR. Ettore, Naples.
- 1893 GNECCHI, SIGR. FRANCESCO, 10, Via Filodrammatici, Milan.
- 1886 HERBST, HERR C. F., Director of the Museum of Northern
Antiquities and Inspector of the Coin Cabinet, Copenhagen.
- 1886 HILDEBRAND, DR. HANS, Riksantiquarien, Stockholm.
- 1873 IMHOOF-BLUMER, DR. F., Winterthur, Switzerland.
- 1893 JONGHE, M. le Vicomte B. de, Rue du Trône, 60, Brussels.
- 1878 KENNER, DR. F., K. K. Museum, Vienna.
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- 1898 MADDEN, F. W., Esq., Holt Lodge, 86, London Road,
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 1899 PICK, DR. BEHRENDT, Herzogliche Bibliothek, Gotha.
 1895 REINACH, M. THÉODORE, 26, Rue Murillo, Paris.
 1891 SYRONOS, M. J. N., Conservateur du Cabinet des Médailles, Athens.
 1881 TIESENHAUSEN, PROF. W., Pont de la Police, 17, St. Petersburg.
 1886 WEIL, DR. RUDOLF, Königliche Museen, Berlin.

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